PainSolv®

*Pain is unavoidable. Choose to suffer less.*

# Instructions for Use and General Information

Please read this booklet before using this medical device.
Keep this guide for future reference.

# Thank you for purchasing PainSolv® for pain and wound management - the drug-free alternative

**Pulsed electromagnetic wave field therapy (PEMF) is based on more than thirty years of worldwide research by renowned scientists. In addition there are many years of practical experience by clinicians, based on numerous scientific studies.**

The PainSolv® medical device is an MDD Class IIa Medical Device, designed and manufactured with pride entirely in the United Kingdom to the highest quality standards as a CE-marked medical device (CE 524889) to give you years of reliable service.

**PainSolv** hold Certificate Number **MD 524888** and operate a Quality Management System which complies with the requirements of **ISO 13485:2003** for the following scope:
**The sales, manufacture and distribution of pulsed electromagnetic field therapy devices for cell function.** PainSolv also hold **Annex V, Section 3.2**, certificate number **CE 536176 for the manufacture of pulsed electromagnetic pulse therapy devices for pain and wound relief**.

Please read this Instruction Manual before using PainSolv®, so you derive the maximum benefit.

Many users report that PainSolv® has been effective in treating various conditions. However, experience of pain and other conditions varies from person to person as no two people experience pain in the same way.

The information contained in this 'Instructions for Use and General Information' booklet is not intended to either help, diagnose or cure any specific condition and no such claims are made.

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# PainSolv® Snapshot

**Pulsed electromagnetic therapeutic waves pass through all types of body tissue, including bone and water, without wave refraction.**

The pulsed electromagnetic waves work at a cellular level within the body, which may encourage cells to produce their own energy, ATP (Adenosine Triphosphate).

ATP is necessary for cell functions within the body, for building up and breaking down molecules, and for transporting substances across cell membranes, also known as ionic migration.

For best results, the PainSolv® medical device can be used as many times as desired in any one session.

- Safe for all ages
- Non-invasive
- Light, compact and portable
- Simple to charge (just like a mobile phone)
- Charge lasts for up to 150 x 4 minute treatments
- Safe with no known side effects or danger of over-treating
- Safe with all types of implants (no heat is generated, therefore PainSolv can be used to help accelerate healing in people with implanted pins or plates)

*Fully illuminated control panel*

*Battery Management indicator*

*Therapy indicators*

*Pulsed output feedback unit*

*Therapy targeting indicator light*

*Bi-phasic inductor heads delivering unique therapy algorithms*

*Solid State componentry*

*Recharging adaptor connector port*

*Integrated rechargeable power management system*

*On/Off button*

*Mode selector button*

*Rigid, impact resistant HIPS moulded casing*

*Ergonomic design to facilitate use by users with disabilities*

# Quick Start Guide

**1** Unpack your PainSolv®.
Your package should contain:

**1 x PainSolv® medical device**
**1 x Charger adaptor**
**1 x Instruction Manual Booklet**

**2** Insert Charger into wall socket. For international use, power adaptor plugs can be provided.

**3** Attach your PainSolv® to the charger adaptor and then switch the adaptor on at the wall socket. In some cases, wall power outlets will not have switches.

**4** Charge your PainSolv® for at least 15 hours before first usage. Failure to do this may result in reduced therapeutic performance. When charging, the red battery indicator light will come on – once it goes out, the unit is fully charged even if the recommended 15hrs has not elapsed.

**5** Once PainSolv® is fully charged, press the Power button. It performs a self-diagnostic check lasting only a few seconds. All the indicators display briefly in sequence, after which PainSolv® pulses. It finishes at the Pain Relief mode, for which the indicator displays for a few seconds. Then PainSolv® will automatically deliver the Pain therapy.

**6** To use PainSolv® on a setting other than Pain Relief, press the Mode button to select Wound Relief or Stress Relief. The Mode button can be used at any time to switch between the settings.

**7** After 5 seconds, the therapy you selected starts. Target the inductor head to the point of pain or discomfort. It can be applied directly to the skin unless there is a wound, ulcer or open fracture. For treating these, it can be applied through clothing, dressings and even plaster casts to avoid cross infection.

**8** The selected therapy light pulses synchronously with the targeting light in the inductor head. This assists you in more accurately targeting the inductor head to the affected area. The targeting process also helps care providers in applying therapy. At the same time, the biofeedback pulse will be felt each time a wave is emitted.

**9** Once the therapy is complete, the battery light flashes slowly for 30 seconds. During this time you can repeat the therapy or select another setting. If a further therapy is not selected, PainSolv® automatically switches off after this 30 seconds, to conserve battery life.

**10** When PainSolv® requires charging, the red battery light flashes rapidly for a prolonged period. Connect the unit to the charger and leave on charge until the red battery light goes off. PainSolv® is then fully recharged.

**11** Only re-attach the unit to the recharging plug adaptor once the red battery light flashes rapidly for a prolonged period, indicating battery recharge is necessary.

# Instructions For Use

*[7]*

*[6]*

*[5]*

*[4]*

*[3]*

*[2]*

*[1]*

**LED colour reference**

| | | | |
|---|---|---|---|
| **Battery** | Red | **Stress Relief** | Green |
| **Pain Relief** | Green | **Target** | Yellow |
| **Wound Relief** | Green | | |

**01** Before first use, charge PainSolv® for 15 hours.

**02** When PainSolv® is on charge, the 'Battery' light [3] is on.

**03** When battery is fully charged, the 'Battery' light [3] goes out and PainSolv® is ready for use.

**04** PainSolv® must be disconnected from the charger before use.

**05** To switch PainSolv® on, the On/Off Button [1] is pressed

**06** PainSolv® runs 'self diagnostic test' with all lights flashing once in sequence, starting with the battery light [3] and ending with the target light [7] at the head of the unit. After all the lights have flashed, the biofeedback unit also vibrates once briefly.

**07** After point 6 above, PainSolv® defaults to 'Pain Relief' function at which point the 'Pain Relief' light [4] remains on for a period of 5 seconds.

**08** At the end of this 5 seconds, the 'Pain Relief' therapy starts, with a duration of 4 minutes.

**09** During the therapy application, the 'Pain Relief' light [4] flashes intermittently as does the targeting light [7] in the head of the unit. The PainSolv® unit pulses simultaneously with the chosen therapy output.

**10** If the user prefers the 'Wound Relief' rather than 'Pain Relief' function, it is selected by pressing the Mode button [2] within the 5 second time limit. 'Wound Relief' is then automatically selected. Pressing the Mode button again within 5 seconds switches to 'Stress Relief'.

**11** With 'Wound Relief' selected, its light [5] illuminates continuously for 5 seconds. After this 5 seconds the therapy begins and continues for 8 minutes.

**12** During the therapy application, the 'Wound Relief' light [5] flashes intermittently as does the targeting light [7] in the head of the unit. PainSolv® pulses simultaneously.

**13** If the 'Stress Relief' function is chosen by pressing the Mode button [2], the 'Stress Relief' light will remain on constant for 5 seconds. After the 5 seconds, the 'Stress Relief' function starts, with a duration of 6 minutes.

**14** During the therapy, the 'Stress Relief' light [6] flashes intermittently as does the targeting light [7] in the head of the unit. PainSolv® pulses simultaneously.

**15** To repeat any of the therapies press the Mode button [2] until the selected therapy light 'Pain Relief' 'Wound Relief' or 'Stress Relief' remains constant, 5 seconds after which the therapy repeats.

**16** PainSolv® may set in motion positive bioelectromagnetic actions within the body, which can continue for up to 10 hours. There are no side-effects from using PainSolv® so it can be used as often as necessary.

**17** PainSolv® switches to Standby automatically for 30 seconds after a therapy is finished, unless the Mode button [2] is pressed again to select another therapy. When in Standby the battery light [3] flashes slowly. The unit switches itself off automatically after 30 seconds to maximise battery life.

**18** There is a failsafe mechanism built into the unit that will prevent permanent damage to the unit, when the correct charger power adaptor supplied with the product is used.
NB: If an incompatible charger power adaptor is used, the PainSolv® unit will be damaged and **invalidate the warranty**.

**19** When the battery needs re-charging, the red battery light [3] flashes rapidly for a prolonged period when the unit is switched on; the PainSolv® unit should be attached to the charger power adaptor and kept connected until the battery light [3] goes out, when the unit will be fully charged.

**20** There is a failsafe mechanism built into PainSolv® to prevent batteries being over-charged.

# Precautions when using PainSolv®

**As with any medical device, there are certain precautions that must be taken when using PainSolv®.**

**PainSolv® must not be used:**
- internally as this will cause serious harm to your health
- by persons undergoing chemotherapy treatment for oncological conditons
- by persons with demand-type heart pacemaker implants
- in conjunction with defibrillators
- in the first three months of pregnancy
- by haemophiliacs
- by epilepsy sufferers unless prescribed medication is being taken to control the condition
- by Children unless supervised by an adult

**PainSolv® must not be applied directly:**
- to the eyes
- to broken skin of any kind, such as ulcers and wounds, to avoid cross-infection and must be applied through medical dressings
- over the carotid artery (upper part of neck immediately behind the ear lobe) as this may cause headaches

**Don'ts with PainSolv®**
- Don't drive for at least 15 minutes after a therapy session
- Don't operate machinery for at least 15 minutes after a therapy session
- Don't use during flights on aircraft until the crew advise that electronic equipment can be used safely
- Don't immerse in liquid of any kind
- Don't use cleansing lotions, but do use wet wipes or dry cloth only
- Don't leave it adjacent to sources of excessive heat
- Don't operate in the immediate vicinity of flammable gases
- Don't drop it on hard surfaces
- Don't open it; attempting to do so could result in serious injury or death (and invalidate the warranty)
- Don't use any charger adapter other than the one supplied as this will damage PainSolv® and **invalidate the warranty**

# Routine Maintenance

**Your PainSolv® medical device requires no maintenance other than regular cleaning of the case and treatment head.**

- Use only alcohol-impregnated wipes (available from pharmacies) for cleaning and disinfection purposes. Any other method of cleaning may damage the unit and void the warranty.

- Should the unit be dropped in any form of liquid it is possible that the inside of the device could also become wet, in which case it must NOT be used (or attached to the mains adaptor) until thoroughly dry. This must be allowed to happen over an extended period as the unit must NOT be placed near radiators or other heat sources.

- PainSolv® is not suitable for autoclaving.

- Remember to put your unit on charge when the red battery indicator light is rapidly flashing red for an extended period.

- The PainSolv® medical device is a sealed device which contains rechargeable battery cells which must not be disposed of with ordinary household waste, but instead at a specialist disposal centre.

- At no time should the unit be dismantled as this could result in serious injury or death, as well as voiding the warranty.

# How PEMF Works With The Body's Own Immune System

**Pulsed electromagnetic wave field therapy may encourage your body's self-healing capabilities by enhancing its efficiency to introduce essential chemicals and proteins into the blood stream. This may also increase the oxygen content of your blood to help transport these vital ingredients to combat many physical problems, with a gentle, non-invasive and painless therapy.**

PainSolv
Cell Function Enhancement
3 in 1
medical device
Drug-free alternative for relief from aching joints and muscles
1 Pain
2 Wound
3 Stress
• Aids Pain Management
• Provides support to body's own immune system
• Provides support to body's own immune system
• May encourage tissue repair
• May encourage tissue repair
• May aid relief from occasional sleeplessness
• May aid relief from occasional tension
• May aid relief from occasional tension
• Suitable for all ages
• Suitable for all ages
Innovative portable health management
PainSolv

Pulsed electromagnetic wave field therapy may encourage the production of natural antioxidants that hamper and may even stop the process of free radicals proliferating within the body.

Free radicals constantly attack proteins, carbohydrates,fats and DNA residing in the body. Every cell in the body suffers approximately 8 to 10,000 free radical attacks daily.

Free radicals are dangerous. Unchecked, they damage health in ways associated with various major diseases. If the body fails to combat them effectively, they may lead to or even cause many of the major diseases that kill people prematurely or that ruin their quality of life.

Antioxidants that occur naturally in the body combat free radicals and are the only sure way to stop their progress. Pain medications, anti-inflammatory drugs (NSAIDs), Aspirin or even cortisone injections cannot halt the damaging progress of free radicals.

# Therapy Options

**PainSolv® uses different unique software algorithms for pain, wound and stress related conditions. Each of these programmed algorithms differs in duration, intensity or frequency.**

The treatment algorithms of PainSolv® have all been developed to deliver the optimum output at the most efficient frequency - the output passes into the body tissue with a varying therapy radius from the point of application. PEMFT works through clothing and specialiised dressings, including plaster casts.

**The main areas PainSolv® may assist to deliver benefits are:**

- **Pain Management** (treatment of pain conditions)
- **Bone Repair** (treatment of fractures failing to heal spontaneously)
- **Peripheral Nerve Stimulation** (Conditions such RSI)
- **Wound Healing and Tissue Regeneration** (recalcitrant venous ulcers, tissue healing)
- **Immune System Stimulation** (improved cell potential efficiency and calcium transport)
- **Neuroendocrine Modulations** (treatment of insomnia, stress and jet lag)

Pulsed electromagnetic wave field therapy may also help enhance the cell utilisation process in the body which in turn may also stimulate improved blood circulation, blood oxygen content, cell growth and blood vessel formation.

PainSolv® may be applied directly to the point of discomfort during pain therapy. The more you use the device, the quicker you may experience positive benefits.

The UK's National Institute of Clinical Excellence (NICE) formally approved acupuncture as an effective treatment for back pain in May 2009.

PainSolv® can be:
- applied by qualified practitioners to acupuncture points on the body
- used in any instance where treatment with needles is contraindicated, such as paediatric care, anti-coagulant treatments and needle phobia
- used to treat wounds provided that it is not applied directly to exposed wounds, ulcers, burns or scalds, or to any skin that is open to to expose the tissue beneath (please note that PainSolv® should never be applied directly to any type of wound in order to avoid cross-infection)

Because pulsed electromagnetic wave field therapy works effectively through all medical dressings (including plaster casts), treatment can be very easily administered.

Pulsed electromagnetic wave field therapy may be utilised for several stress-related conditions, see elsewhere in this Guide (refer to pages 15-31).

PEMFT does not generate heat, and may be used by people with orthopaedic implants (for example hip, knee or elbow replacements).

# Therapy Settings

## PAIN RELIEF

The Pain Relief setting of PainSolv® delivers pre-programmed specific wave forms through unique software algorithms which produce different frequency and output levels. Treatment can be repeated as often as required but at least twice a day.

| Therapy Duration | 4 minutes |
|---|---|

Pulsed electromagnetic wave field therapy creates ionic migration of essential chemicals and proteins from cells into the bloodstream. It does this by agitating the cell-wall membranes, which encourages the release into the bloodstream of neurochemicals, endorphins, that occur naturally in the brain. Endorphins have powerful analgesic properties as do enkaphalins, a particualr type of endorphin having particular opiate-like qualities.

## WOUND RELIEF

PEMFT has been shown to have a beneficial effect on many types of wound, including leg and heel ulcers, pressure sores, sports injuries, non-union fractures, post-operative wounds and also dermatological conditions. Treatment can be repeated as often as required but at least twice a day

| Therapy Duration: | 8 minutes |
|---|---|

Ulcers are wounds or fissures in the surface of the skin that will not heal quickly or even at all. These include venous leg or heel ulcers and pressure sores (bed sores for instance).

Pulsed electromagnetic wave field therapy may stimulate macrophage and pluripotent stem cell activity to combat infection, and accelerate scab formation and wound healing, all of which are important parts of the healing process.

In the natural healing of bone fractures, the affected tissues generate small electric charges which are greater than those of less stressed matter. These charges attract bone-laying cells, osteoblasts, to these areas. The osteoblast builds extra bone material. Pulsed electromagnetic wave field therapy may encourage this process.

With bone injuries, bleeding occurs to form a haematoma in which capillaries quickly form, transporting enriched blood to the injury site. PEMFT may stimulate vasodilation and capillary dilation, which helps to speed up the process of bone repair or formation.
Within the bone itself, the pulsed electromagnetism delivered by PEMFT may cause the induction of small eddy currents in the trace elements. These currents help purify and strengthen the crystal structures, a process which helps attracts bone cells to the area under treatment. In this way, PEMFT may accelerate bone healing, which assists earlier mobilisation and eventual full bone union.

In the Wound Relief setting, PainSolv® may be appropriate for the treatment of damaged ligaments and tendons.

## STRESS RELIEF

PEMFT may encourage stress reduction and encourage improved sleep patterns. Treatment can be repeated as often as required but at least twice a day.

| Therapy Duration: | 6 minutes |
|---|---|

Application of PEMFT on the celiac plexus (more commonly referred to as the solar plexus - see page 48) may deliver the dual benefit of relieving stress and boosting the immune system as this area of the body is rich in nerves and lymphatic vessels.

The solar plexus itself is a network of ganglia and nerves lying in front of the aorta behind the stomach, supplying the abdominal viscera. Within this area lies a further network of lymphatic vessels, the superior mesenteric lymph nodes, and the celiac lymph nodes.

PEMFT may optimise the functions of this part of the central nervous system, particularly by producing changes in calcium transport and mediation of mitogenic response, such as stimulation of the division of cellular nuclei. Certain types of immune cells begin to divide and reproduce rapidly in response to certain stimuli, or mitogens, which can encourage natural killer cell augmentation for fighting viruses.

When pulsed electromagnetic wave field therapy is directed towards the general cranial area of the head, the pineal gland (a small endocrine gland in the centre of the brain) is encouraged to promote production of seratonin or melatonin, which are the body's regulators of normal relaxation and sleep patterns. To promote seratonin production, use in the morning and to promote melatonin production, use in the evening.

PEMFT may induce relaxation and reduction of stress levels, which in turn may have a positive effect on those suffering from blood pressure problems. Pulsed electromagnetic wave field therapy may reduce the acidity and viscosity of the blood so improving blood circulation and regulating blood pressure. Regulating blood pressure means that high blood pressure becomes lower and low blood pressure becomes higher.

Jet lag can interfere with normal sleep patterns. Pulsed electromagnetic wave field therapy may help rectify the sleep problem by balancing the body's system to return it to its normal circadian rhythm (the body clock). When circadian rhythms, which extend over 24 hours, are affected by jet lag, pulsed electromagnetic wave field therapy may help produce modulated seratonin and melatonin using the technology that has been shown to normalise cellular processes. Pulsed electromagnetic wave field therapy may encourage the body clock to revert to its normal pattern.

# Conditions Information

The following notes are provided for users to gain a brief understanding of their conditions. There are also suggested applications for the PainSolv® device, but these are not intended to either help diagnose or cure any specific condition and no such claims are made. No individual is the same and results may vary from person to person. If you have specific medical concerns, please consult your medical doctor. The suggested applications provided are not intended to suggest that a condition will be cured, only that symptoms may be reduced.

| CONDITION | BRIEF DESCRIPTION | SETTING | SUGGESTED APPLICATION |
|---|---|---|---|
| **Achilles Bursitis** | A musculoskeletal pain around the Achilles tendon where the bursae become inflammed. | *PAIN* | Place PainSolv head on either side of the Achilles Tendon directly where the pain is. You can treat both sides one after the other if desired. |
| **Acute Pain** | Acute pain is one which starts suddenly either as a result of a trauma or for no apparent reason. | *PAIN* | Apply PainSolv direct to the point of pain as many times as desired. |
| **Angina** | Heart pain due to insufficient blood flow / blood circulation to the heart. | | Diagnosis of this condition must be made by a medical doctor before use of PainSolv begins. |
| **Ankle Pain** | Pain in and around the joints of the ankles. | *PAIN* | Apply PainSolv direct to the point of pain both on the ankle and upper area of affected foot. |
| **Ankylosing Spondylitis** | Chronic inflammation of the spinal area. | *PAIN* | It is best to ask a family member or carer to apply PainSolv to the top, middle and lower spine morning, noon and night on a regular basis if possible. |
| **Arachnoiditis** | Inflamed membranes around the spinal cord. | | Diagnosis of this condition must be made by a medical doctor before use of PainSolv begins. |
| **Arm Pain** | Pains in the muscles or joints of the arm. | *PAIN* | Apply PainSolv direct to the point of pain as many times as desired. |
| **Arthritis** | Osteoarthritis – wearing of the bones and joints. Rheumatoid Arthritis – inflamed membranes around and between the joints. | *PAIN* | Apply PainSolv direct to the point of pain as many times as desired. |
| **Back Pain** | Aches and pains in the muscles of the back. | *PAIN* | If the point of pain is inaccessible, it is best to ask a family member or carer to apply PainSolv to the top, middle and lower spine morning, noon and night on a regular basis. |
| **Baker's Cyst** | Swelling caused by fluid from the knee joint pushing to the back of the knee, producing a fluid filled sac. | *WOUND* | Apply PainSolv directly onto the most swollen extremity of the fluid filled sac and apply as many times as desired. |

| CONDITION | BRIEF DESCRIPTION | SETTING | SUGGESTED APPLICATION |
|---|---|---|---|
| **Bicipital Tendonitis** | Musculoskeletal pain in the biceps and shoulders. | *PAIN* | Apply PainSolv directly to the point of pain if possible but remember that as the unit emits pulsed waves that pass directly through all body tissue types, it is possible to treat this type of pain by applying the unit on the more accessible area at the front of the body in this instance. |
| **Brachial Plexus** | Nerve pain running from the spine, through the neck, to the armpit and down into the arm. | *PAIN* | If the point of pain is inaccessible, it is best to ask a family member or carer to apply PainSolv to the top, middle and lower spine morning, noon and night on a regular basis. The therapy can also be applied directly into the armpit and on the neck. |
| **Bunion** | Inflamed tissue on a bony swelling at the base of the big toe. | *WOUND* | Apply PainSolv directly onto the most swollen extremity of the swelling and apply as many times as desired. |
| **Bursitis** | (Housemaids Knee / Plumbers Elbow) Inflamed and sore fluid filled lump, between tendons and joints of the knee or elbow. | *PAIN* | Apply PainSolv directly onto the most swollen extremity of the swelling and apply as many times as desired. |
| **Carpal Tunnel Syndrome** | Nerve from the forearm to the hand is trapped or squeezed at the wrist. | *PAIN* | Apply PainSolv direct to the point of pain as many times as desired. |
| **Causalgia** | Nerve injury causing severe burning sensation in the nerve areas. | *WOUND* | Apply PainSolv direct to the point of pain as many times as desired. |
| **Central Pain Syndrome** | Neuropathic pain caused by damage to the central nervous system. Can be burning, aching, cutting or tearing sensations or sudden painful shots of pain. | | Diagnosis of this condition must be made by a medical doctor or, where appropriate, a dentist, before use of PainSolv begins. |
| **Cervical Hyperextension (Whiplash)** | Forcefully stretched or pulled soft tissue in the spine, causing headaches and stiffness in the neck and back of the head. | *PAIN* | Apply PainSolv to the tops of the shoulder immediately adjacent to the neck and also to the base of the head at the back as many times as desired. |
| **Chest Wall Pain** | Tenderness of the cartilage connecting ribs to the chest bone. | *PAIN* | Apply PainSolv direct to the point of pain twice a day. If the discomfort is experienced on both sides of the chest, treat each side during treatment for one session each per treatment. |
| **Cholycystectomy Pains** | Continuing pains after surgical removal of the gall bladder. | *WOUND* | Apply PainSolv direct to the general area of pain as many times as desired. |
| **Chondromalacia Patella** | Softening and degeneration of the cartilage beneath the knee cap. | *WOUND* | Apply PainSolv direct to the general area of discomfort as many times as desired. |

| CONDITION | BRIEF DESCRIPTION | SETTING | SUGGESTED APPLICATION |
|---|---|---|---|
| **Chronic Fatigue Syndrome (Also see 'ME' on page 22)** | Severe fatigue and tiredness causing painful muscle and joints sleep disorder, poor memory and concentration. | *STRESS* | Apply PainSolv to the solar plexus as many times as desired for at least 14 days. Application can also be made to the inner wrist area of both hands. |
| **Chronic Pain** | Pain that is continuous and has been suffered for a long period of time. | *PAIN* | Apply PainSolv direct to the general area of pain as many times as desired. |
| **Circulation** | 'Pins and needles' can be suffered due to insufficient blood supply to parts of the body. | *STRESS* | Apply PainSolv direct to the general area of discomfort, as many times as desired. |
| **Cluster Headache** | Normally comes on suddenly, and in 'clusters' of headaches, which re-occur the same time every day. Painful stabbing pains around the eye or temple which may spread to the face and neck. | *PAIN* | Apply PainSolv to the temples (one session for each side of head) and also to the base of the skull. Repeat this treatment as many times as desired for 7 days. |
| **Collapsed Vertebra** | Compression fracture in the bone, normally caused by osteoporosis – where the amount of bone tissue is below a normal amount – more likely in an elderly person. | | Diagnosis of this condition must be made by a medical doctor before use of PainSolv begins. |
| **Compartment Syndrome** | Most common in the lower leg and forearm. This is a swelling which compresses muscles, nerves and blood vessels. It is a severe pain, which does not respond to pain medication and in the most serious cases could lead to amputation of infected limb. | *WOUND & PAIN* | As this condition is a multiple problem, it is best to apply two therapies to either the shin or forearm areas as many times as desired for at least 2 weeks. |
| **Crohn's Disease** | Inflammatory bowel disease, with severe 'waves' of abdominal pains. Crohn's Disease is a condition that causes both chronic pain and heightened stress levels due to nature of the disease. | | Diagnosis of this condition must be made by a medical doctor before use of PainSolv begins. |
| **Curvature of the spine (Scoliosis)** | Musculoskeletal pain which is linked to the spine being curved. | *PAIN* | As the point of pain is likely to be inaccessible, it is best to ask a family member or carer to apply PainSolv to the top, middle and lower spine morning, noon and night on a regular basis. |
| **Degenerative Arthritis** | This is caused by wear and eventual breakdown of the protein (cartilage) in one or more joints. | *WOUND* | Apply PainSolv direct to the point of discomfort and pain, which should be directly onto the affected joints. The device should be used as many times as desired on a regular basis. |

| CONDITION | BRIEF DESCRIPTION | SETTING | SUGGESTED APPLICATION |
|---|---|---|---|
| **Disc conditions** | Various terms for this type condition eg: herniated disc, degenerative disc disease, pinched nerve, bulging disc etc. Common pain experienced leg pain, numbness, tingling or weakness in the leg. | *WOUND* | Apply PainSolv direct to the point of discomfort and pain, which should be directly onto the affected joints. The device should be used as many times as desired on a regular basis. |
| **Ear ache (Otitis Media)** | Serious ear ache, caused by middle ear infection. Most common cause of hearing loss in children, and commonly contracted during winter and early spring. | | Diagnosis of this condition must be made by a medical doctor before use of PainSolv begins. |
| **Elbow pain** | Reasons for elbow pain are: Epicondylitis, Tendonitis, which is inflammation of the joint (also referred to as Tennis Elbow). Irritated nerve (funny bone) can cause numbness, and pain. | *PAIN* | Apply PainSolv directly to the point of pain. Repeat as often as necessary but at least twice a day. |
| **Erthyromelalgia (EM)** | Symptoms of this can be red or purple colours infected parts of the body such as the knees, face, ears and feet, sometimes swollen and hot to the touch, with a burning type of pain. Symptoms and infected areas vary from person to person. | *WOUND* | Apply PainSolv to the area where the condition is worst in first instance and then to the perimeters where the discomfort or discolouring extends to. Repeat as often as necessary. |
| **Eye pain** | Pain that is caused by blood pressure or other ophthalmic problems. | | Diagnosis of this condition must be made by a medical doctor before use of PainSolv begins. |
| **Facet Syndrome** | This is generally a chronic pain, associated with degenerative disc disease. A severe pain which may be due to sudden movement which traumatizes the joint which sits on each side of the spinal column. | *PAIN* | Apply PainSolv to the area where the pain is worst in first instance and then to the perimeters where the pain extends to. Repeat as often as necessary. |
| **Fibroids** | These are growths, made up of muscle fibres that grow on the womb. Some women suffer terrible pain with this and some do not suffer any symptoms at all. | *PAIN & WOUND* | Whilst the pain is the dominant factor in this condition, when PainSolv should be applied to the lower stomach, it is also worth applying the device to the same area whilst on the Wound setting. Apply treatments one after the other morning and evening. |
| **Fibromyalgia** | A burning, 'flu like symptom' pain, from within the muscles and ligaments in the body. This is a chronic condition, and although the tissues of the muscles and ligaments are painful, they are not inflamed. | *PAIN* | Apply PainSolv to the areas where pain is worst, which in many sufferers will be multiple sites. Apply the device for one therapy duration on each site. Repeat as many times as desired on a regular basis. |

| CONDITION | BRIEF DESCRIPTION | SETTING | SUGGESTED APPLICATION |
|---|---|---|---|
| **Foot Pain** | There are various reasons for this. Corns and Calluses, in grown toe nails, bunions and bunionettes, interdigital neuroma (inflammation of the nerves between the third and forth toe, and the bottom of the foot), hammer or claw toe, metatarsalgia, stress fracture, sesamoiditis, Plantar fasciitis, bursitis of the heel, Haglund's deformity, Achilles tendonitis, tarsal tunnel syndrome, flat feet, and high arches. All of these conditions can be very painful. | *PAIN & WOUND* | Apply PainSolv to the affected areas where pain is worst, but also on the opposite surface of the foot to ensure all areas are treated. In the case of corns or calluses and in-grown toenails, you can also treat these areas with Wound setting. Always apply at least twice a day, but remember that you can apply as many times in succession as you wish without side effects. |
| **Fracture** | This happens when a bone cannot withstand the pressure placed on it by an outside force. The pain occurs when the nerve endings surrounding the bone are irritated. When the bone bleeds, the swelling associated with this causes pain. The muscles around the broken bones, spasm to hold the bone in place and this also causes pain. | | Diagnosis of this condition must be made by a medical doctor or, where appropriate, a dentist, before use of PainSolv begins. |
| **Frozen Shoulder** | This could be caused by inflammation, thickening or shrinkage of the capsule that surrounds a shoulder joint, which results in gradual limitation of movement in the joint. Frozen shoulders happen more commonly to people who suffer with diabetes. | *PAIN* | Apply PainSolv to the front, back and upper surface of the shoulder in succession. Treat each area for one full session with the device and repeat as necessary. |
| **Gout** | High uric acid levels in the blood, which is normally dissolved, as it is passed through the kidneys – crystallises and deposits in the joints and tissues. | | Diagnosis of this condition must be made by a medical doctor before use of PainSolv begins. |
| **Groin injury** | This injury is caused by the 'adductor muscle' group of muscles in the inner thigh being stretched or pulled beyond their normal excursion. | *WOUND* | Apply PainSolv to the area where the pain is worst in first instance and then to the perimeters where the pain extends to. Repeat as often as necessary. |
| **Headache** | Mild to severe pain in the head region, and can also be felt in the back of the neck. Not normally serious, and can be treated with medicines. | *PAIN* | Apply PainSolv to the temples on each side of head and also to the base of the skull. Repeat as many times as necessary. |
| **Heart Burn** | Heart burn has nothing to do with the heart. It is a burning sensation due to gastric acid being regurgitated. This burning can also be felt in the neck and throat. | *STRESS* | Apply PainSolv to the alimentary canal tract in the centre of the chest as many times as necessary. If the problem persists, you must consult a doctor as soon as possible. |

| CONDITION | BRIEF DESCRIPTION | SETTING | SUGGESTED APPLICATION |
|---|---|---|---|
| **Heel Pain** | This commonly occurs due to daily exercise and daily use, as the heel is the first part of the foot to have contact with the ground. | *PAIN* | Apply PainSolv directly to the point of pain also to back of heel. Repeat as often as necessary but at least twice a day. Treat site of pain and back of heel separately. |
| **Hernia** | When a part of a body cavity bulges out of area where it is normally contained. There are various types of hernia eg: Injuinal, hiatus, scrotal and umbilical. | *PAIN* | Apply PainSolv directly to the point of pain. Repeat as often as necessary but at least twice a day. |
| **Herpes Zoster (shingles)** | This is an infection which is caused by the same virus as the chickenpox virus, and an outbreak can be a very painful blistering type rash and can show on any part of the body. Outbreaks linked to stress, impaired immune system and aging. | *WOUND* | Using the targeting LED in the head of the PainSolv device, aim the beam at the inflamed and blistered area, but do not touch the tissue. |
| **Hip Pain** | This is either in or around the hip joint. Sometimes, although the pain may be in the hip, you may have referred pain, where you have pain in the hip, but you can perhaps feel it in the thigh or even perhaps feel the pain in your lower back. | *PAIN* | Apply PainSolv directly to the point of pain. Repeat as often as necessary but at least twice a day until initial inflammation has subsided. If the pain radiates to the upper thigh or lower back, then it is wise to treat these areas too. Always treat each area with a separate session (this can be done immediately). |
| **Infection** | Infections are caused by bacteria. Bacteria infect the body's cells by releasing harmful toxins, and damage the immune system; this then leads to inflammation which causes infection. | *STRESS* | Apply PainSolv to the solar plexus. |
| **Injury or Trauma** | Physical trauma can be caused by accidents or a hard blow to a part of the body. | *PAIN & WOUND* | Apply PainSolv directly to the point of pain. Repeat as often as necessary but at least twice a day. If a wound is involved, then also treat with Wound Relief setting twice a day at least. |
| **Insomnia** | This is difficulty in either initiating or maintaining sleep. Some causes can be stress, anxiety or depression | *STRESS* | Apply PainSolv to the solar plexus or inside of wrists. |
| **Intercostal pain** | An abrupt pain when the nerve that runs along one of the ribs in the thoracic cage becomes slightly inflamed, also known as intercostal neuralgia. This pain can worsen with a movement of the vertebral column, incorrect posture, and the simple movement of breathing or coughing, or even talking. | | Diagnosis of this condition must be made by a medical doctor before use of PainSolv begins. |

| CONDITION | BRIEF DESCRIPTION | SETTING | SUGGESTED APPLICATION |
|---|---|---|---|
| **Intermittent Claudication** | This is caused due to a lack of sufficient blood to the muscles, and so not supplying the oxygen needed. This can happen in the calf or thigh muscles or even the muscles in the buttocks. | *STRESS* | Apply PainSolv to the rear of the knee and also on the calf, treating each area with a separate treatment. |
| **Irritable bowel syndrome (IBS)** | This can be a chronic and debilitating condition. Symptoms may vary from person to person, but common symptoms are: flatulence, abdominal cramping or pains, mucus in the stools and / or diarrhoea and constipation. IBS is a condition that causes both chronic pain and heightened stress levels due to nature of the disease. | *PAIN & STRESS* | Apply PainSolv using PAIN setting to the point of pain or to the solar plexus using STRESS setting. Apply as many times as desired in any one session. |
| **Ischial Bursitis** | Inflammation of a tiny fluid filled sac (bursa) which acts to reduce friction between tissues in the body. There are approx 160 of these little sacs located near the major joints of the body such as the shoulders, knees, elbows and hips. | *WOUND* | Apply PainSolv directly onto the most swollen extremity of the fluid filled sac and apply up to three times daily. |
| **Jaw Ache** | This can be one of a group of conditions, generally a painful feeling in the muscles that control the act of the chewing. The pain generally goes away with no treatment. | *PAIN* | Apply PainSolv to the joint of the jaw in front of the ear and treat twice a day. |
| **Knee Pain** | This is normally the result of an injury like a tear or rupture of cartilages or cruciate ligaments. It can also be the result of arthritis gout or infections. | *PAIN & WOUND* | Apply PainSolv to the front of the leg immediately below the patella (kneecap) and also at the back of the knee in the joint on a regular basis. |
| **Laminectomy** | An operation performed on either the neck or back to relieve pressure on nerves. | *STRESS* | Apply PainSolv on the top of each shoulder where it joins the neck and treat each separately twice a day at least. |
| **Lateral Epicondylitis (Tennis Elbow)** | This pain could be due to repetitive motions. The pain starts outside of the elbow and passes down the arm to the hand. | *PAIN* | Apply PainSolv to the point of pain on the outside of the elbow and also immediately below the elbow. Treat each area with a separate treatment and repeat at least twice daily. |
| **Leg Pain** | There are various reasons for leg pain. It could be due to cramps (dehydration or low amounts of potassium, magnesium, sodium or calcium in the blood), muscle strain (torn or pulled muscle), inflamed tendons (tendonitis), blood clots (deep vein thrombosis), infection of the bone (osteomyelitis), inflammation of the leg joints (arthritis or gout), nerve damage or varicose veins. | *PAIN* | Apply PainSolv to the point or points of pain on the leg and treat each area with a separate treatment and repeat at least twice daily. |

| CONDITION | BRIEF DESCRIPTION | SETTING | SUGGESTED APPLICATION |
|---|---|---|---|
| **Ligamentous Pain** | Ligament pain is caused by torn or pulled muscles not healing quickly. This pain can be quite debilitating, and can, on occasions, create referred pain to other parts of the body through the autonomic nervous system. | *WOUND* | Apply PainSolv to the point of discomfort or pain and treat three times daily. This is a slow process and you should expect to treat yourself for between 3 and 4 weeks. |
| **Loin Pain** | Sources of pain are generally found in the kidneys, but stones could be in the urinary tract, renal pelvis or urethra causing severe pain. | *PAIN* | Apply PainSolv to the kidney area of the back as well as the point of pain in the groin area. Treat each area with a separate treatment and repeat three times daily. |
| **Lower Back Pain** | Back Pain is a symptom. Referred pain from other organs is also a reason for back pain. Sciatica (disc herniation pressing directly on the nerve) could be a cause for lower back pain. Pulled muscle in the lower back, due to carrying or lifting something heavy could also be a cause. | *PAIN* | Assuming that the condition is not sciatica (see separate guideline), apply PainSolv to the point of pain and also at the corresponding point on the front of the body. Each point should be treated with a separate session twice a day at least. |
| **Lumbago** | Lumbago originates in the lower back and can move from there to the buttocks, groin area or into the back of the thigh. | *PAIN* | Apply PainSolv to the buttock area of the back on each side, as well as the point of pain at the back of the thigh. Treat each area with a separate treatment and repeat at least three times. |
| **Lumbar Prolapse** | Slipped or herniated discs in the spinal column. | *PAIN* | Apply PainSolv to each side of the spine. Treat each area with a separate treatment and repeat three times. |
| **Lumbar Spondylosis** | This is a fusing of one or more vertebral joints in the spine. | *PAIN* | Apply PainSolv to each side of the spine adjacent to the affected vertebrae. Treat each area with a separate treatment and repeat at leaset three times daily. |
| **Mastectomy Pain** | Numbness, pain and weakness in the affected arm, hand and shoulder. The cause is damaged nerves that have been cut during surgery. | *WOUND* | Apply PainSolv to the affected shoulder and just below the elbow and treat each area with a separate treatment and repeat at leaset three times daily. |
| **Myalgic Encephalomyelitis (ME)** | This is also known as Chronic Fatigue Syndrome or Post Viral Fatigue Syndrome. This illness affects the nervous and immune systems of the body. Common symptoms are severe exhaustion, memory and concentration difficulties and muscle pain. | *STRESS* | Apply PainSolv to the solar plexus. It is also worth applying PainSolv to the inner wrists at leaset twice a day – treat each area with a separate treatment session. |

| CONDITION | BRIEF DESCRIPTION | SETTING | SUGGESTED APPLICATION |
|---|---|---|---|
| **Mechanical Lower Back Pain** | This is non-specific back pain which is usually found in the spinal joints, soft tissue surrounding the spinal column or the vertebrae, but there is no physical abnormality of the back. | *PAIN* | Apply PainSolv to each side of the spine adjacent to the area of pain. Treat each area with a separate treatment and repeat at leaset three times daily. |
| **Medial Epicondylitis *(Golfer's Elbow)* Lateral Epicondylitis *(Tennis Elbow)*** | These conditions are caused by overuse of the muscles and tendons in the forearm, causing inflammation in the elbow joint. | *PAIN* | Apply PainSolv to the point of pain on the inside or outer of the elbow and also immediately below the elbow. Treat each area with a separate treatment and repeat at least twice daily. |
| **Meralgia Paraesthetica** | Condition which causes tingling, numbness or a burning pain on the outer thigh. Skin can be sensitive to the touch. It is caused by the compression of the cutaneous nerve as it leaves the pelvis. | *PAIN* | Apply PainSolv to the point of pain on the outer thigh and also the inner thigh on the affected leg. Treat each area with a separate treatment and repeat at least twice daily. |
| **Migraine** | Severe throbbing head pain, pain near the eye on the affected side, sensitive to light and sound, nausea – these are all symptoms of migraine. This pain can be severe and debilitating. | *STRESS* | Apply PainSolv to the temples on each side of the head and also to the base of the skull at the back of the head. Treat each area separately as many times as necessary. |
| **Migrainious Neuralgia (Cluster Headache)** | Know as cluster headaches. They happen within a short time of each other, and are short attacks of pain around the eyes. | *PAIN* | Apply PainSolv to the temples on each side of the head. Treat each area separately as many times as necessary. |
| **Morton's Metatarsalgia** | This injury is caused by repetitive trauma to the fore foot. The ends of the nerves get pinched and trapped during the 'push-off' phase of walking. A dull ache / bruise like feeling to the ball of the foot, which worsens if walking barefoot. | *PAIN* | Apply PainSolv to the ball of the foot and also the top of the foot, treating each area separately. Treat at least twice a day. |
| **Muscle Injury** | This injury can happen at any time eg; walking or lifting heavy things and during sports or exercise. The muscle or tendons can be torn or pulled excessively. | *WOUND* | Apply PainSolv to the point of discomfort and treat at least three times daily. |
| **Musculoskeletal Pain** | The causes for this are varied. The feeling is that all muscles in the body are pulled, tired or overworked. | *PAIN* | Apply PainSolv to the point of pain and treat at least three times daily. |
| **Myofacial Pain Syndrome (MPS)** | The facia surrounds muscle, bone, nerve and every organ and blood vessel in the body. Trauma to this tissue can result in pressure on the nerves, muscle and bones etc of the body, not only causing pain when pressed, but also causing a referred pain, elsewhere in the body. | *PAIN* | Apply PainSolv to the point of pain and also the jaw joint and the temples on each side of the head. Treat each area separately at least twice daily. |

| CONDITION | BRIEF DESCRIPTION | SETTING | SUGGESTED APPLICATION |
|---|---|---|---|
| **Neuralgia** | In many cases the cause of neuralgia (nerve pain) is not identifiable. Inflammation, trauma, infection and even chemicals can cause neuralgia. | *PAIN* | Apply PainSolv to the point of pain and treat at least twice daily. |
| **Neuropathy** | Neuropathy is damage to the nerves caused through a complication of diabetes. There are a number of ways that the nerves can be damaged because of diabetes, and they are all related to blood glucose levels being too high, for a long period of time. There are four types of Neuropathy: Diabetes, Peripheral, Proximal and Focal. | *PAIN* | Apply PainSolv to the point of pain and treat at least twice daily. |
| **Night Cramps** | This is a muscle spasm that could last, commonly from just a few seconds to up to 10 minutes. | *PAIN* | Apply PainSolv to the point of pain and treat at least twice daily. Keep treating even though the pain has subsided for at least one week. |
| **Occipital Neuralgia** | Occipital nerves (greater and lesser) run from where the spinal column meets the neck, up onto the scalp and the back of the head. The pain is caused when these nerves are pinched by over tensed muscles in this area, or trauma to the back of the head. | *PAIN* | Apply PainSolv on the top of each shoulder where it joins the neck and treat each separately at least twice a day. |
| **Oesophagitis** | Acid reflux which has leaked from the stomach up into the oesophagus. | *STRESS* | Apply PainSolv to solar plexus once a day. |
| **Osteoarthritis** | Inflammation of the joints – when the joints are affected in this way the cartilage that covers the ends of the joint bones becomes damaged and thin. At this point the body tries to repair itself, making the bone beneath the cartilage, thicker and misshaped. Chalky deposits form in the cartilage and cause the joint to become swollen and hot. | *PAIN* | Apply PainSolv to the point of pain and treat at least twice daily on a regular basis. |
| **Osteoporosis** | Means 'porous bones'. The bones are made up of a very thick outer shell, and a mesh of bone on the inside. Osteoporosis means that these bone parts become weak and fragile and prone to braking. | | Diagnosis of this condition must be made by a medical doctor or, where appropriate, a dentist, before use of PainSolv begins. |
| **Para tendonitis** | Tendonitis of the foot, where the Posterior Tibial tendon in the foot is affected by injury or overuse. | *PAIN* | Apply PainSolv to the top and sole of the affected foot at least twice a day (separate treatment for each area). |
| **Pelvic Pain** | Can be a chronic pain which affect the areas between your hips and below your navel. | *PAIN* | Apply PainSolv to both sides of the lower abdomen adjacent to the hips and repeat treatment to each side morning and night. |

| CONDITION | BRIEF DESCRIPTION | SETTING | SUGGESTED APPLICATION |
|---|---|---|---|
| **Perineal Pain** | To be found in the sexual organs. In the labia of women and the scrotum and base of the penis in men. Can be tender to the touch, or feels like a pressure sort of pain in the area. | *PAIN* | Apply PainSolv to the point where the groin meets the thigh for ladies and at the point where the penis meets the scrotum for gents. If the pain is too severe, remember that it is OK to use PainSolv by holding it a few millimeters from the skin. Treat each area with a separate therapy at least twice a day. |
| **Period Pain** | Cramps in the lower abdomen, when the menstrual cycle begins. Can last for two or three days. | *PAIN* | Apply PainSolv to the point where the groin meets the thigh and in the middle of the lower back. Treat each area with a separate therapy up to four times a day. |
| **Peripheral Neuropathy** | Damage to the peripheral nervous system, which sends information from the brain and spinal cord to all the other parts of the body. | *PAIN* | Apply PainSolv to each side of the spine base and treat each area separately at least twice a day. |
| **Persistent Pain** | Chronic pain that has continued for 3 months or more. | *PAIN* | Apply PainSolv to the point of pain and treat at least twice a day on a regular basis. |
| **Phantom Limb Pain** | Pain that occurs after an amputation of a limb. | *PAIN* | Apply PainSolv to the point of amputation pain and treat twice a day on a regular basis. |
| **Plantar Fasciitis** | Severe pain where the ligaments attach to the rear foot, five metatarsal bones and to the heel. | *PAIN* | Apply PainSolv to the back of the ankle and heel junction and also the base of the heel and treat each areas at least twice a day on a regular basis. |
| **Polymyalgia Rheumatica** | Pain and stiffness in the hip or shoulder area. In some cases there appears to be inflammatory arthritis present. | *PAIN* | Apply PainSolv to the side of the hip or the tops of the shoulders as necessary and treat up to three times daily on a regular basis. |
| **Post Operative Pain** | Pain that continues on after surgery. | *WOUND* | Apply PainSolv to the point of post-operative wound and treat twice a day on a regular basis. |
| **Post Viral Fatigue Syndrome (ME)** | Please see ME. | *STRESS* | Apply PainSolv to the solar plexus. It is also worth applying PainSolv to the inner wrists twice a day – treat each area with a separate treatment session. |
| **Post-Herpetic Neuralgia (Shingles)** | Please see Herpes Zoster. | *WOUND* | Using the targeting LED in the head of the PainSolv device, aim the beam at the inflamed and blistered area, but do not touch the tissue. |

| CONDITION | BRIEF DESCRIPTION | SETTING | SUGGESTED APPLICATION |
|---|---|---|---|
| **Pre-Menstrual Pain** | Please see Period Pain | *PAIN* | Apply PainSolv to the point where the groin meets the thigh and in the middle of the lower back. Treat each area with a separate therapy up to four times a day. |
| **Prolapsed Disc Injury** | The disc bursts and fragments press on ligaments and nerves near to the disc, creating severe pain. | *PAIN* | Apply PainSolv to each side of the spine adjacent to the area of pain. Treat each area with a separate treatment and repeat three times daily. |
| **Pseudo gout (Calcium Pyrophosphate Deposition Disease)** | Deposited calcium crystals in the joints that cause the tissues to become swollen and painful. This term literally means 'false gout'. | *PAIN* | Apply PainSolv to the point of pain and treat at least twice a day on a regular basis. |
| **Psoriatic Arthropathy** | This is a condition, where skin cells grow too quickly and flake, leaving red and sore scaly skin (psoriasis) that is linked to the development of arthritis. Long term medication is generally required for this condition. | *WOUND* | Apply PainSolv to the point of discomfort and treat at least twice a day on a regular basis. |
| **Quadrantus Lumborum** | Musculoskeletal condition that causes referred pain to the buttock and the back. | *PAIN* | Apply PainSolv to the buttock area of the back on each side, as well as the back of the thigh. Treat each area with a separate treatment and repeat three times daily. |
| **Radiculopathy** | Nerve irritation when the central portion of a disc ruptures and presses on the spinal cord or its nerves as they exit the spinal column. | *PAIN* | Apply PainSolv to each side of the spine adjacent to the area of pain. Treat each area with a separate treatment and repeat three times daily. |
| **Ramsay Hunt Syndrome** | Reactivation of the varicell-zoster virus which lies dormant in the body after childhood chickenpox. It can lead to facial paralysis by damage to the 7th nerve in the face. Causes severe ear pains, loss of taste, vertigo and hearing disorders. | *WOUND* | Using the targeting LED in the head of the PainSolv device, aim the beam at the inflamed and blistered area, but do not touch the tissue. |
| **Reynaud's Syndrome** | Usually triggered by cold temperatures. Decrease of blood flow to extremities such as fingers and toes, nose, lips and ear lobes. | *WOUND* | Apply PainSolv to the area of discomfort and treat at least twice a day on a regular basis. |
| **Rectal pain** | Rectal pain can be a mild irritation, or can be very debilitating. Reasons for pain in the rectum could be: Haemorrhoids, anal fissures, infection, abscesses, ulcerative colitis or Crohn's disease. | *PAIN & WOUND* | Apply PainSolv to each buttock area of discomfort and treat at least twice a day on a regular basis on Wound Relief setting and also treat with Pain Relief setting at top of buttocks in centre. PainSolv® should never be used internally. |

| CONDITION | BRIEF DESCRIPTION | SETTING | SUGGESTED APPLICATION |
|---|---|---|---|
| **Reflex Sympathetic Dystrophy (RSDS)** | Burning type of pain, tenderness and swelling of the skin. Irritation of the nerves, leading to distorted impulses affecting the blood vessels and skin. See Causalgia. | *PAIN* | Apply PainSolv direct to the point of pain as many times as desired. |
| **Restless legs** | This is a neurological disorder – an unpleasant sensation, with an uncontrollable urge to move a resting leg, in an effort to stop this feeling. It has been described a burning sensation, or a tugging or creeping feeling in the muscle. Lying down or relaxing seems to bring on these sensations. | *STRESS* | Apply PainSolv to the side of the hip and also the outside of the affected thigh, treating up to three times daily, with one treatment applied when in bed at night. |
| **Rheumatoid Arthritis** | An inflammatory disease that affects the matching joints in the body. It normally affects the fingers and wrists, causing swollen and hot joints, rendering them stiff and difficult to move with ease. | | Diagnosis of this condition must be made by a medical doctor before use of PainSolv begins. |
| **Rib Pain** | This could be caused by broken ribs, or an injury or inflammation of the chest muscles. Inflammation of the rib or the cartilage connecting to the rib is called Costochondritis. Pleurisy, which is an inflammation of the lining of the lungs, will produce a similar pain. | *PAIN* | Apply PainSolv direct to the point of pain as many times as desired. |
| **Rotator Cuff** | Chronic pain that affects 1 or more of the 4 muscles in the shoulder. These muscles are supraspinatus, infraspinatus, teres minor and subscapularis and they help to keep the humerus in place against the shoulder blade. | *PAIN* | Apply PainSolv on the top and front of each shoulder where it joins the neck and treat each separately twice a day at least. Also treat the rear of the shoulder by asking a family member or carer to help with this. |
| **Sacralisation** | Lower back pain due to L5 vertebrae joining the sacrum, which bears the weight and movement of the trunk of the body. | *PAIN* | Apply PainSolv to each side of the spine adjacent to the area of pain. Treat each area with a separate treatment and repeat three times daily. |
| **Sacro-iliac Joint Pain** | Mild to severe lower back pain, pain in the buttocks and pain that appears to be deep into the pelvic area. Pain in the hip, groin, thigh and down the leg. Stiffness in the lower spine area. The pain could radiate from either the ligaments or in the joint. Pain signals are sent to the brain via the many nerve endings in the joint. | *PAIN* | Apply PainSolv to each side of the spine adjacent to the area of pain. Treat each area with a separate treatment and repeat three times daily. |

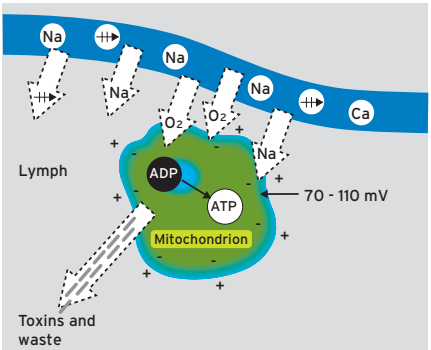
| CONDITION | BRIEF DESCRIPTION | SETTING | SUGGESTED APPLICATION |
|---|---|---|---|
| **Sciatica** | A very painful shooting pain that begins in the lower back and travels down the buttock and into the upper, and even as far as the lower leg. Pain is present during both sitting and standing, sharp movements tend to make the pain worse. | *PAIN* | Apply PainSolv to each side of the spine adjacent to the area of pain, on the outside of the upper thigh, the outside of the calf and the top of the foot on the affected side of the body. Treat each area with a separate treatment and repeat three times daily. |
| **Shingles** | Please see Herpes Zoster. | *WOUND* | Using the targeting LED in the head of the PainSolv device, aim the beam at the inflamed and blistered area, but do not touch the tissue. |
| **Sinusitis** | Nasal congestion, indicating a bacterial infection. Further symptoms could be bad breath, and facial tenderness or pressure. | *WOUND* | Apply PainSolv on the cheeks directly adjacent to the nose and apply treatment to each side at least twice a day. |
| **Spinal Stenosis** | The spinal canal is narrowed leaving little room for the spinal nerves to the point where they are being crushed. Pain suffered could be weakness, pain and pins and needles. | *PAIN* | Apply PainSolv to each side of the spine adjacent to the area of pain. Treat each area with a separate treatment and repeat three times daily. |
| **Spondylolisthesis** | This is a condition where one vertebrae slips forward onto the vertebrae in front, OR could be due to a stress fracture. Usually affecting the L5 vertebra in the lower back. Initially, pain will spread across the lower back feeling like a pulled muscle. | | Diagnosis of this condition must be made by a medical doctor before use of PainSolv begins. |
| **Spondylosis** | Growth spurs within the bones of the spine, or mineral deposits in the cushions between each vertebra are causes for this condition. | *PAIN* | Apply PainSolv to each side of the spine adjacent to the area of pain. Treat each area with a separate treatment and repeat three times daily. |
| **Sports injury** | Mostly injuries to muscles, bones, cartilage and tissues. | *PAIN* | Apply PainSolv direct to the point of pain as many times as desired. |
| **Stiffness** | Joint stiffness is mostly caused by one of the various forms of arthritis. Or muscle stiffness due to over exertion. | *STRESS* | Apply PainSolv direct to the point of pain as many times as desired. |
| **Subachromial Bursitis** | This muscle from the top of the shoulder blade to the humerus bone is the muscle used in throwing and moving the arm up and to the side. If this muscle is not trained properly for throwing sports it could be severely damaged. | *PAIN* | Apply PainSolv on the top and front of each shoulder where it joins the neck and treat each separately at least twice a day at least. Also treat the rear of the shoulder by asking a family member or carer to help with this. |

| CONDITION | BRIEF DESCRIPTION | SETTING | SUGGESTED APPLICATION |
|---|---|---|---|
| **Supraspinatus Tendonitis** | Pain from this muscle which could appear suddenly, will be felt over the top of the shoulder. Inflammation in the tendon which attaches it to the bone is usually caused by repetitive use (RSI). | *PAIN* | Apply PainSolv on the top and front of each shoulder where it joins the neck and treat each separately twice a day at least. Also treat the rear of the shoulder by asking a family member or carer to help with this. |
| **Temporo-mandibular Joint Dysfunction (TMJ)** | This joint connects the lower jaw to the skull. There in one either side of the jaw. Pain normally felt every time the jaw moves eg: talking, chewing and yawning. Clicking or grating sounds may be heard. The jaw could be difficult to open very wide, and the face and mouth could swell on the affected side. | *PAIN* | Apply PainSolv to the jaw/ear joint junction and the temples on each side of the head. Treat each area separately at least twice daily. |
| **Tendonitis** | The tendon is a flexible band of tissue. If its usual smooth motion is impaired, it becomes inflamed causing pain. | *PAIN* | Apply PainSolv direct to the point of pain as many times as desired. |
| **Tennis Elbow** | A musculoskeletal condition caused by repetitive motions, causing tenderness on the outer part of the bone. | *PAIN* | Apply PainSolv to the point of pain on the outside of the elbow and also immediately below the elbow. Treat each area with a separate treatment and repeat at least twice daily. |
| **Tenosynovitis (Tendonitis)** | Inflammation of the tendon, where either there has been repetitive trauma to the area, or commonly high deposits of calcium left near the joints, so causing the inflammation of the tendon. | *PAIN* | Apply PainSolv to the point of pain on the outside and inside of the affected joint. Treat each area with a separate treatment and repeat at least twice daily. |
| **Tension Headaches** | Headaches generally thought to be brought about due to high levels of stress, but research shows that this could be due to a dysfunction of the nervous system. Also possibly through incorrect balances of certain chemicals in the brain. | *STRESS* | Apply PainSolv to the temples on each side of the head and on the rear of the neck just below the base of the skull. Repeat a separate treatment on each area at least twice a day. |
| **Testicular Pain** | Trauma to the testicles will produce severe pain, and could cause some bruising. Torsion, where the testicle twists inside the scrotum to such an extent that the blood vessels are blocked, so stopping blood flow to the testicles – this would need urgent surgery. | *PAIN* | Apply PainSolv to the underside of the scrotum and also to the point where the underneath base of the penis meets the scrotum and treat each area separately up to three times daily. |
| **Thoracic Outlet Syndrome** | A rare disorder that affects the nerves from the arms to the neck and from the base of neck to the armpit, causing weakness and wasting of the muscles of the hand, as well as numbness in this area. | *PAIN* | Apply PainSolv to the side of the shoulder joint and also the wrist areas – treating each one separately, apply three times a day. |

| CONDITION | BRIEF DESCRIPTION | SETTING | SUGGESTED APPLICATION |
|---|---|---|---|
| **Toothache** | Pain from the tooth could be caused by the surrounding gums or an infection in the jaw. A chipped or cracked tooth, a cavity or gum disease will result in inflammation of the nerve and can cause severe pain. | | Diagnosis of this condition must be made by a dentist, before use of PainSolv begins. |
| **Transverse Myelitis** | Disorder caused by inflammation that destroys the Myelitis (fatty substance that insulates the nerve cells on the spinal chord) on the same level (transverse) of both sides of the spinal chord. | *PAIN* | Apply PainSolv to each side of the spine adjacent to the area of pain. Treat each area with a separate treatment and repeat three times daily. |
| **Traumatic Avulsion of Nerve Roots** | Nerve roots, due to massive trauma such as a motorcycle or car accident, having been torn from the exit of the spinal cord. | | Diagnosis of this condition must be made by a doctor, before use of PainSolv begins. |
| **Trigeminal Neuralgia (Tic Doloureux)** | An unpredictable facial pain, generally accompanied by muscle spasms. Burning or stinging, electric shock type stabbing pains, which can last from a few seconds to minutes. | *PAIN* | Apply PainSolv to the point of pain (remember that it is as effective to hold the unit about 6mm from the skin in case the face is too sore to touch in the cheek area) and also the jaw joint on each side of the head. Treat each area separately at least twice daily on a regular basis. |
| **Trochanteric Bursitis** | Hip and thigh, or buttock pain. Caused through irritated or inflamed joints. | *PAIN* | Apply PainSolv to the buttock area of the back on each side, as well as the point of pain at the back of the thigh. Treat each area with a separate treatment and repeat three times daily. |
| **Twelfth Rib Syndrome** | Could be either constant dull ache or sharp stabbing pain that could, if it goes undiagnosed, last for months. Caused by one rib overlapping another leaving sufferer with abdominal pains. | *PAIN* | Apply PainSolv to the upper abdomen on the affected side of the body and repeat treatment three times a day until pain subsides. |
| **Ulcerative Colitis** | Ulcerative Colitis is a condition that causes both chronic pain and heightened stress levels due to nature of the disease. A type of bowel disease that has flare-ups and remissions. Fatigue, fever, abdominal pains and diarrhoea are common symptoms. The inner lining of the colon or large intestine becomes inflamed and develops small open sores, which bleed and produce pus and mucus. | *PAIN & STRESS* | Apply PainSolv using PAIN setting to the point of pain or to the solar plexus using STRESS setting. Apply as many times as desired in any one session. |

| CONDITION | BRIEF DESCRIPTION | SETTING | SUGGESTED APPLICATION |
|---|---|---|---|
| **Varicose Ulcer** | An itchy, brown crusty type of ulcer, with a red and weeping centre. These types of ulcers are created and slow to heal due to bad circulation, and generally appear on the legs above the ankle. | *PAIN & WOUND* | As this is an open wound effectively,you should never touch the ulcer with PainSolv, but instead treat through medical dressing, using the targeting LED in the head of the unit to position. As this can be a very painful condition, it is worth applying the device in PAIN mode and then WOUND mode in each session. Treat the ulcer at least twice a day at least for two weeks and then leave for a week and repeat treatment. |
| **Whiplash (Cervical Hyperextension Injury)** | Abnormal sharp movement of the neck muscles, ligaments and tendons, normally due to a motor accident, assault or injuries occurring during sporting activities. | *PAIN* | Apply PainSolv to the tops of the shoulder on each side of the neck, treating each side with a separate session. Repeat this two or three times daily. |

# The Importance Of Healthy Cells



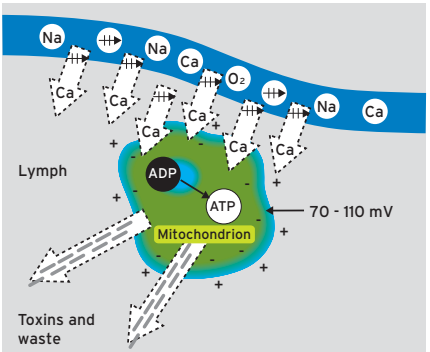

**Fully functioning healthy cell**

When cell voltage is anywhere between 70-110mV then it is considered healthy and reasonable amounts of ATP is produced, although toxin expulsion is not necessarily fully efficient.

**The human body relies on a healthy cell network to avoid poor circulation, declining performance, premature ageing, and degenerative diseases. Normal cell functioning and energy levels stimulate cell metabolism, increase oxygen absorption and accelerate the removal of toxic chemicals and waste, which empowers the body to recover its self-healing capabilities.**

Much illness is the result of impaired cellular function. A healthy cell operates at a voltage between 70-110mV in order to produce ATP molecules (Adenosine Triphosphate), which are vital for a healthy body.

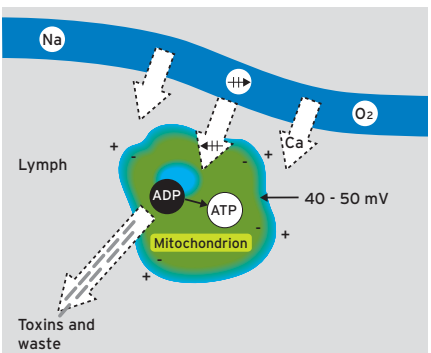
Clinical research carried out for NASA proved that millisecond-duration pulsed electromagnetic fields have the greatest beneficial effect on living tissues over any other energy form.




**Functionality of a healthy cell subjected to pulsed electromagnetic fields**

Cell potential is maximised and toxin expulsion becomes very efficient. Production of ATP is also enhanced dramatically which encourages improved ionic migration.

A sick cell, with voltage range between 40 - 50mV loses energy as there is not enough ATP available. Very sick cells have a voltage of only 20mV. They are incapable of regeneration, requiring almost 20 times more energy than healthy cells.




**Compromised functionality of a sick cell**

When the cell membrane voltage drops to anywhere in the region of 40-50mV, there is not enough ATP available for effective functioning, which prevents proper ionic migration. Also, toxins are not expelled efficiently. The mitochondrion produces very little ATP (the immediate source of energy for the mechanical work performed by muscle). ADP also converts to ATP but not efficiently.

Pulsed electromagnetic wave field therapy may influence cell behaviour by inducing electrical changes around and within the cell wall membrane. The resulting improved blood supply may increase oxygen pressure, which activates and regenerates cells.

# How PEMF Works

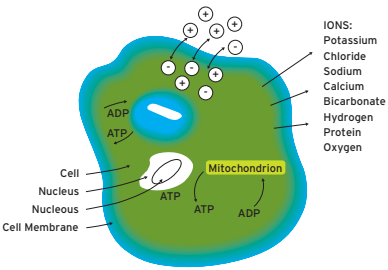
**Pulsed electromagnetic wave field therapy may encourage improved calcium transport which increases absorption of calcium in bones and improves the quality of cartilage in joints, decreasing pain dramatically. This cell ionisation process is also known as ionic migration.**

This empowers the body to recover its self-healing capabilities and the process is enhanced by the effect the therapy triggers. It promotes pluripotent stem cell stimulation that creates specialist cells in addition to enhancing their interaction with macrophages within the body's natural immune system.

Pulsed electromagnetic wave field therapy is based on more than 30 years of worldwide research carried out by renowned scientists. In addition there are many years of practical experience by clinicians, based on many scientific studies on the degree of effectiveness of pulsed electromagnetic wave field therapy.

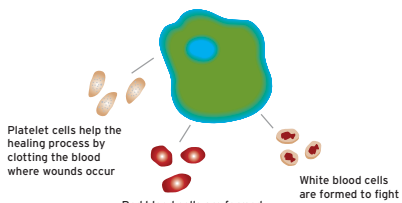
The therapy works by delivering specific pulsed electromagnetic wave forms into the body tissues of sufferers, using technology which is proven to have vigorous biological effects that may be beneficial for a wide range of conditions.

**Pulsed electromagnetic wave field therapy stimulates cell ionisation processes (ionic migration)** When cell function is enhanced, essential chemicals and proteins are transported through the cell walls.




The Cell Ionisation process is further enhanced by the presence of essential fatty acids, amino acids, enzymes and oxygen in the bloodstream.

Pulsed electromagnetic wave field therapy stimulates Stem Cell activity which encourages them to morph into other specialist cells.


Platelet cells help the healing process by clotting the blood where wounds occur
Red blood cells are formed whose job it is to carry oxygenated blood to body tissues and organs
White blood cells are formed to fight infections

# Using PainSolv® On Acupuncture Points

| FEMALE | Acupuncture Point | PainSolv Setting |
|---|---|---|
| Headache | 1 2 3 4 6 7 10 11 19 20 | Stress or Pain |
| Migraine | 1 7 12 | Stress or Pain |
| Head Injury | 1 2 3 6 7 8 10 11 20 23 | Pain or Wound |
| Ear | 3 12 | Pain |
| Toothache | 4 1 18 21 | Pain |
| Neck | 8 1 7 16 17 26 23 | Pain |
| Neck whiplash | 8 4 1 7 | Wound or Pain |
| Throat | 1 3 7 10 12 14 | Pain |
| Upper Back | 4 9 17 22 23 | Stress or Pain |
| Lower Back | 4 5 6 20 | Pain or Stress |
| Lumbago | 1 4 5 6 7 9 24 | Pain |
| Muscle Spasm | 4 5 | Stress or Wound |
| Backache | 4 5 6 9 17 20 22 23 | Pain |
| Shoulders | 1 2 3 7 8 14 17 26 | Stress or Pain |
| Armpits | 2 12 | Pain |
| Arms | 2 3 8 12 17 23 | Pain |
| Elbows | 1 2 3 8 14 23 | Pain |
| Forearms | 1 2 8 10 12 | Pain |
| Wrists | 3 7 12 | Pain |
| Hands | 1 2 3 10 12 | Pain |
| Fingers | 1 2 3 10 12 | Pain |
| Breast Area | 1 2 3 7 | Pain |
| Lungs | 3 7 | Stress |
| Upper Abdomen | 5 6 | Stress |
| Urinary Tract | 13 19 25 26 | Pain |
| Lower Abdomen | 2 5 6 9 19 | Pain or Stress |
| Stomach | 2 5 6 8 | Pain |
| Menstruation | 2 5 13 15 19 26 | Pain |
| Period Pain | 2 5 13 15 19 26 | Stress or Pain |
| Genitalia | 13 19 25 26 | Stress or Pain |
| Ovaries | 5 6 8 13 | Pain or Wound |
| Uterus | 5 6 8 13 | Wound |
| Hips | 4 5 6 | Pain |
| Thighs | 6 9 | Pain |
| Knees | 6 9 | Pain |
| Lower legs | 4 5 6 9 | Pain |
| Leg Cramps | 4 9 | Wound or Pain |
| Insomnia | 27 | Stress or Pain |
| Ankles | 1 4 5 6 18 19 20 25 | Pain |
| Feet | 1 4 5 6 18 19 20 25 | Pain |
| Neuralgia | 4 7 | Pain |
| Muscle Cramps | 25 26 | Pain or Stress |

| MALE | Acupuncture Point | | | | | | | | | | PainSolv Setting |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Headache | 1 | 2 | 3 | 4 | 6 | 7 | 10 | 11 | 19 | 20 | Pain or Stress |
| Migraine | 1 | 7 | 12 | | | | | | | | Pain or Stress |
| Head Injury | 1 | 2 | 3 | 6 | 7 | 8 | 10 | 11 | 20 | 23 | Wound or Pain |
| Ear | 3 | 12 | | | | | | | | | Pain |
| Toothache | 4 | 1 | 18 | 21 | | | | | | | Pain |
| Neck | 8 | 1 | 7 | 16 | 17 | 26 | 23 | | | | Pain |
| Neck whiplash | 8 | 4 | 1 | 7 | | | | | | | Pain or Wound |
| Throat | 1 | 3 | 7 | 10 | 12 | 14 | | | | | Pain |
| Chest | 1 | 2 | 3 | 7 | | | | | | | Stress or Pain |
| Lungs | 4 | 5 | 6 | 20 | | | | | | | Pain or Stress |
| Upper Abdomen | 5 | 6 | | | | | | | | | Pain |
| Urinary Tract | 13 | 19 | 25 | 26 | | | | | | | Pain or Wound |
| Lower Abdomen | 2 | 5 | 6 | 9 | 19 | | | | | | Pain |
| Stomach | 2 | 5 | 6 | 8 | | | | | | | Pain |
| Hernia | 5 | 6 | 19 | | | | | | | | Wound |
| Genitalia | 13 | 19 | 25 | 26 | | | | | | | Pain |
| Testicles | 4 | 5 | 6 | | | | | | | | Pain or Wound |
| Upper Back | 4 | 9 | 17 | 22 | 23 | | | | | | Pain or Wound |
| Lower Back | 4 | 5 | 6 | 20 | | | | | | | Pain |
| Lumbago | 1 | 4 | 5 | 6 | 7 | 9 | 24 | | | | Pain or Wound |
| Muscle Strain | 4 | 5 | | | | | | | | | Pain |
| Backache | 4 | 5 | 6 | 9 | 17 | 20 | 22 | 23 | | | Pain |
| Sciatica | 4 | 5 | 6 | 9 | 22 | 24 | | | | | Pain |
| Shoulders | 1 | 2 | 3 | 7 | 8 | 14 | 17 | 26 | | | Pain |
| Armpits | 2 | 12 | | | | | | | | | Pain |
| Arms | 2 | 3 | 8 | 12 | 17 | 23 | | | | | Pain |
| Elbows | 1 | 2 | 3 | 8 | 14 | 23 | | | | | Pain |
| Forearms | 1 | 2 | 8 | 10 | 12 | | | | | | Pain |
| Wrists | 3 | 7 | 12 | | | | | | | | Pain |
| Hands | 1 | 2 | 3 | 10 | 12 | | | | | | Pain |
| Fingers | 1 | 2 | 3 | 10 | 12 | | | | | | Pain |
| Hips | 4 | 5 | 6 | | | | | | | | Pain |
| Thighs | 6 | 9 | | | | | | | | | Pain |
| Knees | 6 | 9 | | | | | | | | | Pain |
| Lower legs | 4 | 5 | 6 | 9 | | | | | | | Pain |
| Leg Cramps | 4 | 9 | | | | | | | | | Pain or Wound |
| Calf Cramps | 4 | 9 | | | | | | | | | Stress or Pain |
| Ankles | 1 | 4 | 5 | 6 | 18 | 19 | 20 | 25 | | | Stress or Pain |
| Feet | 1 | 4 | 5 | 6 | 18 | 19 | 20 | 25 | | | Pain |
| Neuralgia | 4 | 7 | | | | | | | | | Pain |
| Muscle Cramps | 25 | 26 | | | | | | | | | Pain |
| Insomnia | 27 | | | | | | | | | | Pain or Stress |

**The UK's National Institute of Clinical Excellence (NICE) formally approved acupuncture as an effective treatment for back pain in May 2009. It is possible to use PainSolv® on acupuncture points if you are unable to reach a particular point of discomfort on your body and you do not have any family or carer that can apply the treatment for you, although for best results using these methods we recommend that qualified practitioners apply PainSolv® therapy.**

To facilitate usage on Acupuncture points, we have prepared reference tables and photographs to illustrate appropriate points clearly.

Simply select the condition you are suffering from and refer to the guidance photographs below and right. Any of the indicated acupoints may work effectively on your condition.

1

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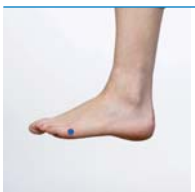

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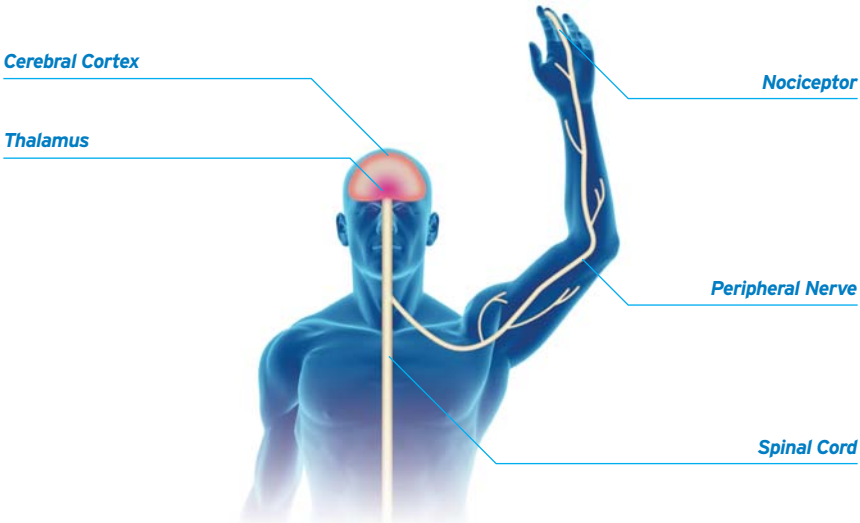
# How We Know We Have Pain




**Pain that we experience is the result of a series of interactions that happen between three different areas of your nervous system:**

### Peripheral nerves

These extend from your spinal cord to your skin, as well as to your muscles and all internal organs. There are two types of peripheral nerves.

One type have receptors that respond to touch, pressure, vibration, cold and warmth. The other type have 'nociceptors' at their extremities, which are receptors that identify either actual or potential tissue damage.

Nociceptors are concentrated in extremities of the body in areas such as fingers and toes. When nociceptors detect a harmful stimulus such as something that comes into violent contact with the body, they relay pain messages as electrical impulses along a peripheral nerve to your spinal cord and brain. This system ensures that we feel acute pain almost instantly.

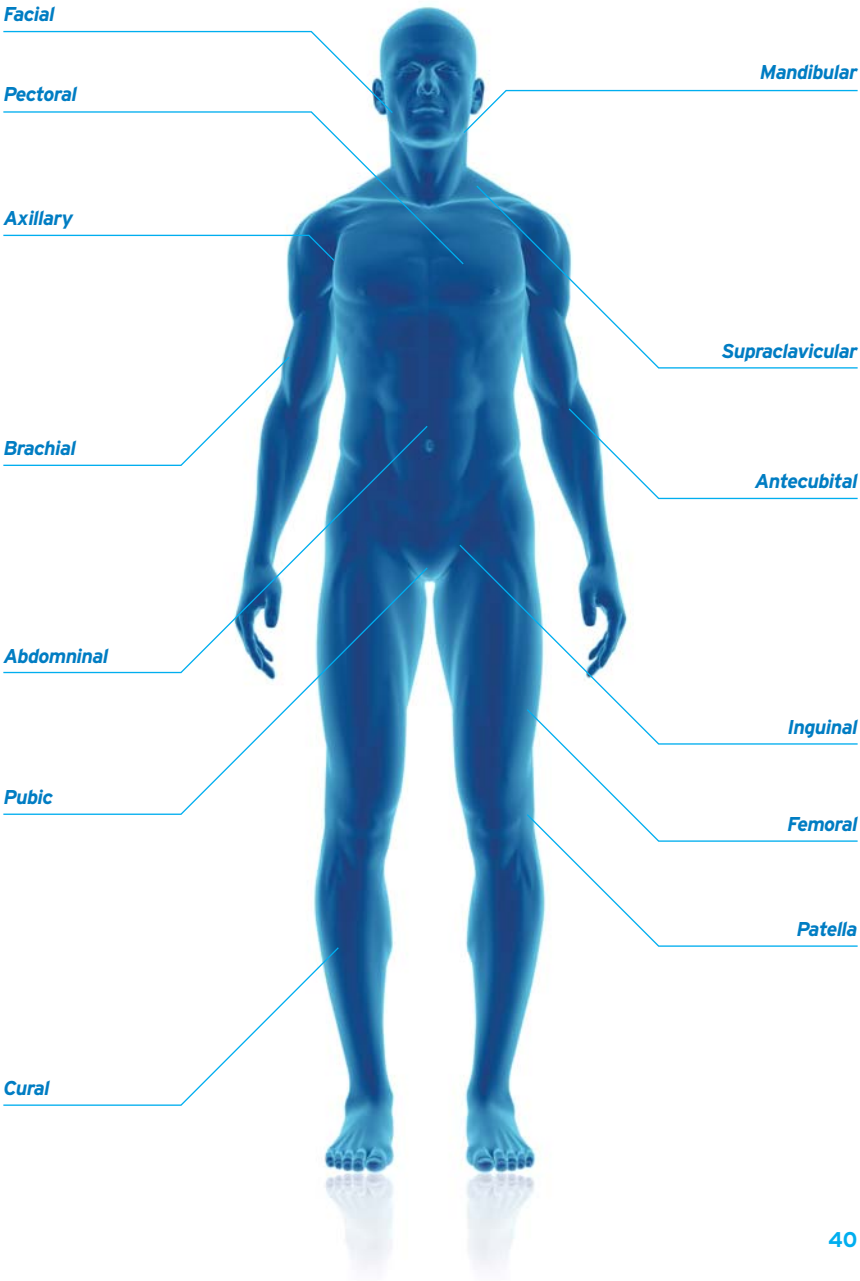
### Spinal cord

The pain impulses enter the spinal cord through the dorsal horn, where they release neurotransmitters that activate other nerve cells which then process the signal and send it up to brain.

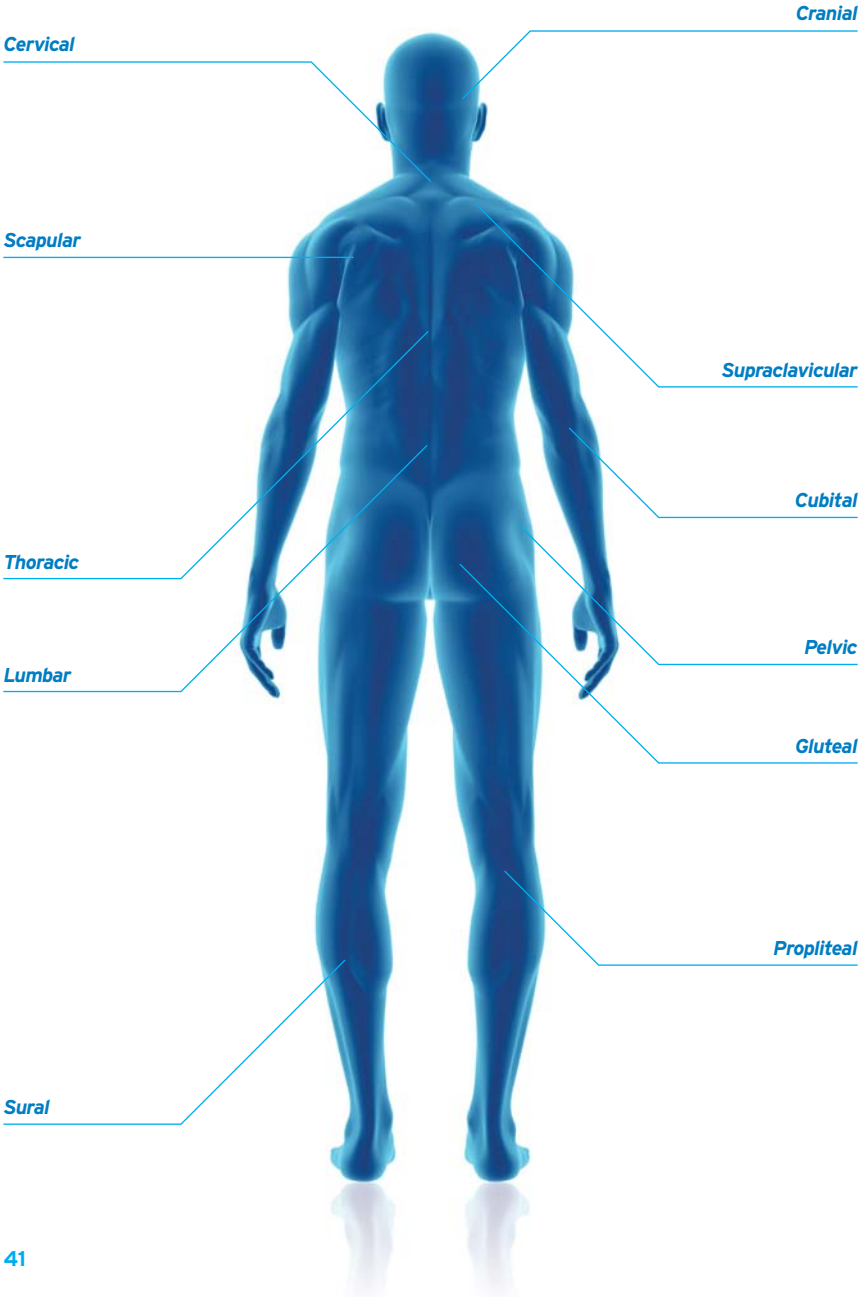
### Brain

The neurotransmitter activations eventually arrive at the thalamus, which is the 'motor control' in the brain that receives all sensory signals. The thalamus then forwards the message simultaneously to three different areas of the brain: the somatosensory cortex, the limbic system and the frontal cortex. The brain then responds to the pain and sends impulses that attempt to reduce the pain in the spinal cord.

# Regions Of The Body: Front

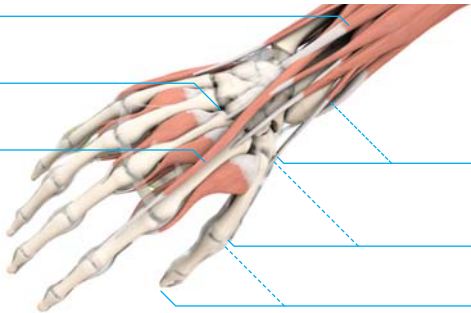


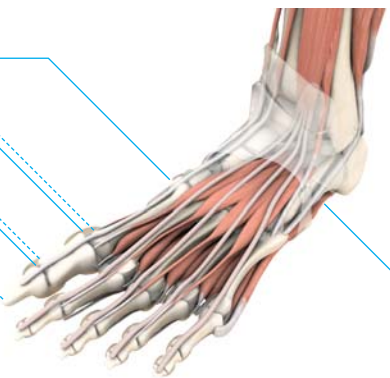
# Regions of the Body: Rear



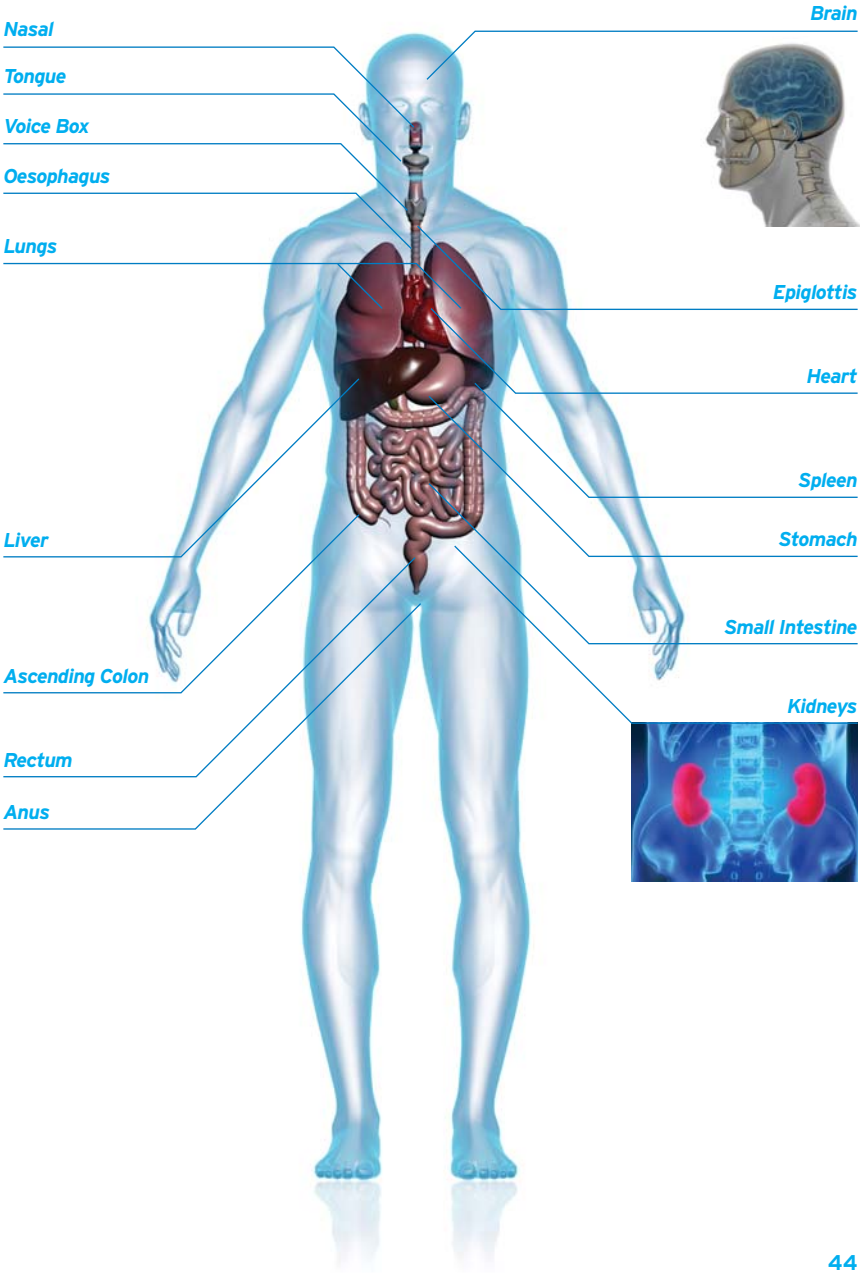
# Quick Guide to Musculoskeletal Body Parts

# Quick Guide To Hand And Foot

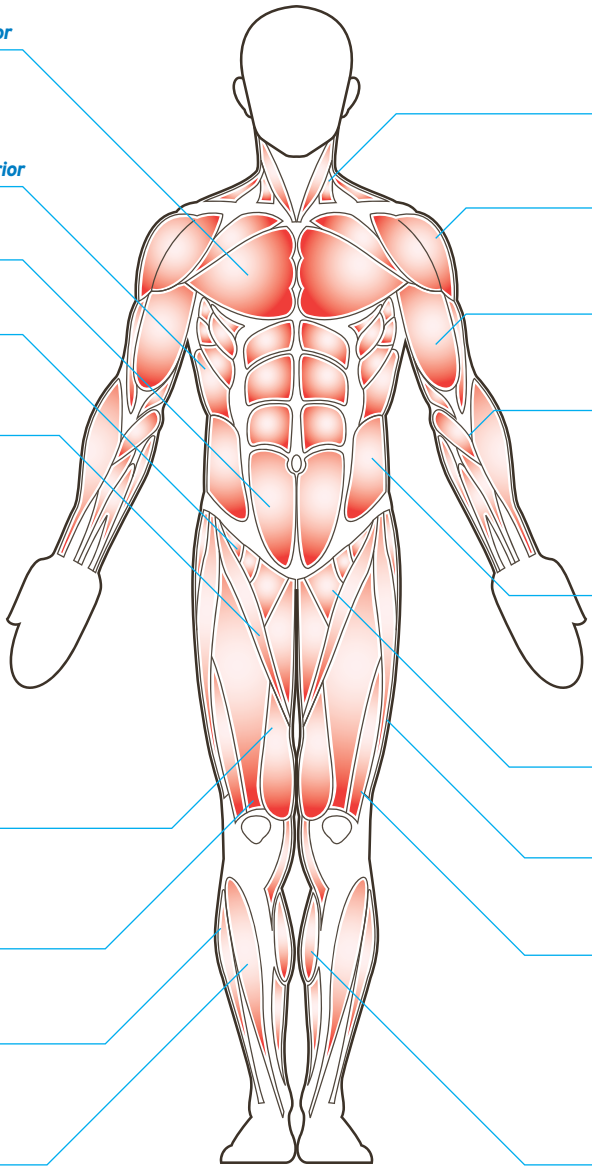


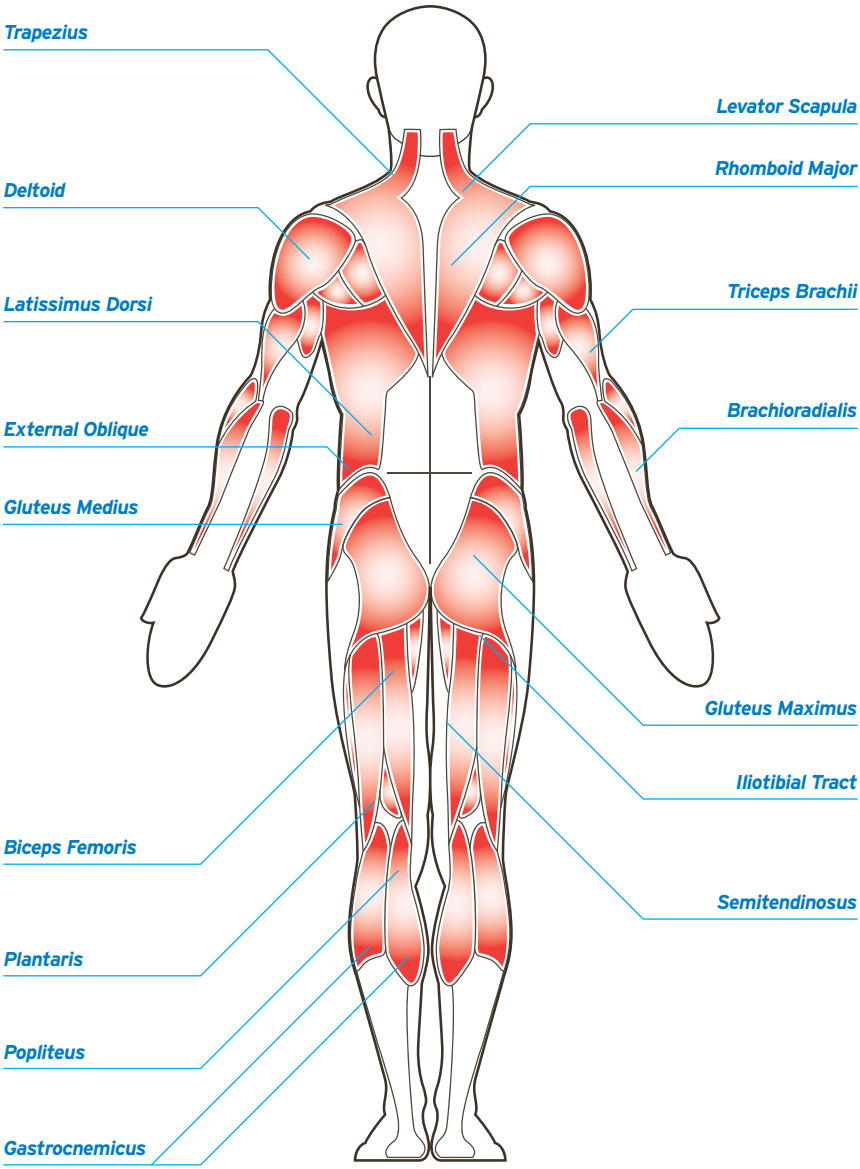
# Quick Guide To Key Parts Of The Body



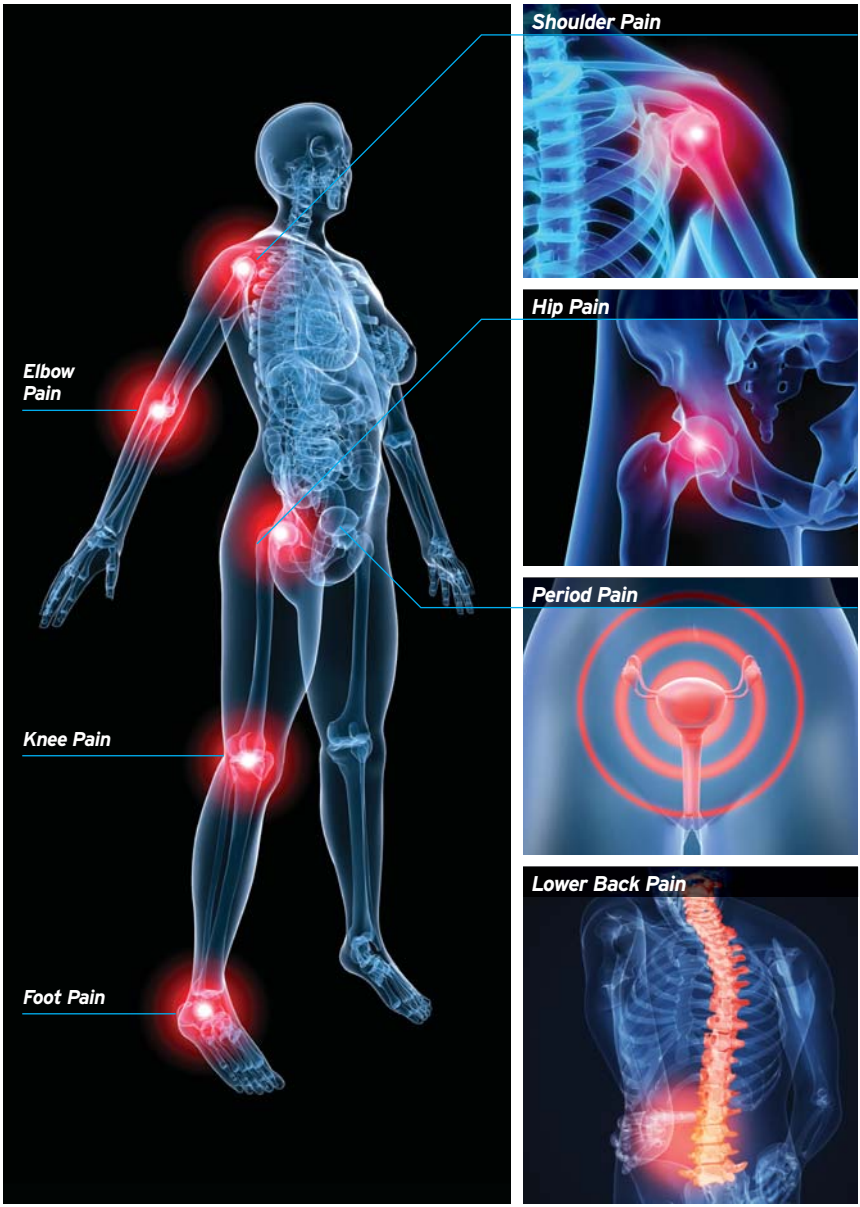
# Quick Guide To Main Muscles Of The Body: Front



# Quick Guide To Main Muscles Of The Body: Rear



# Common Joint Pains

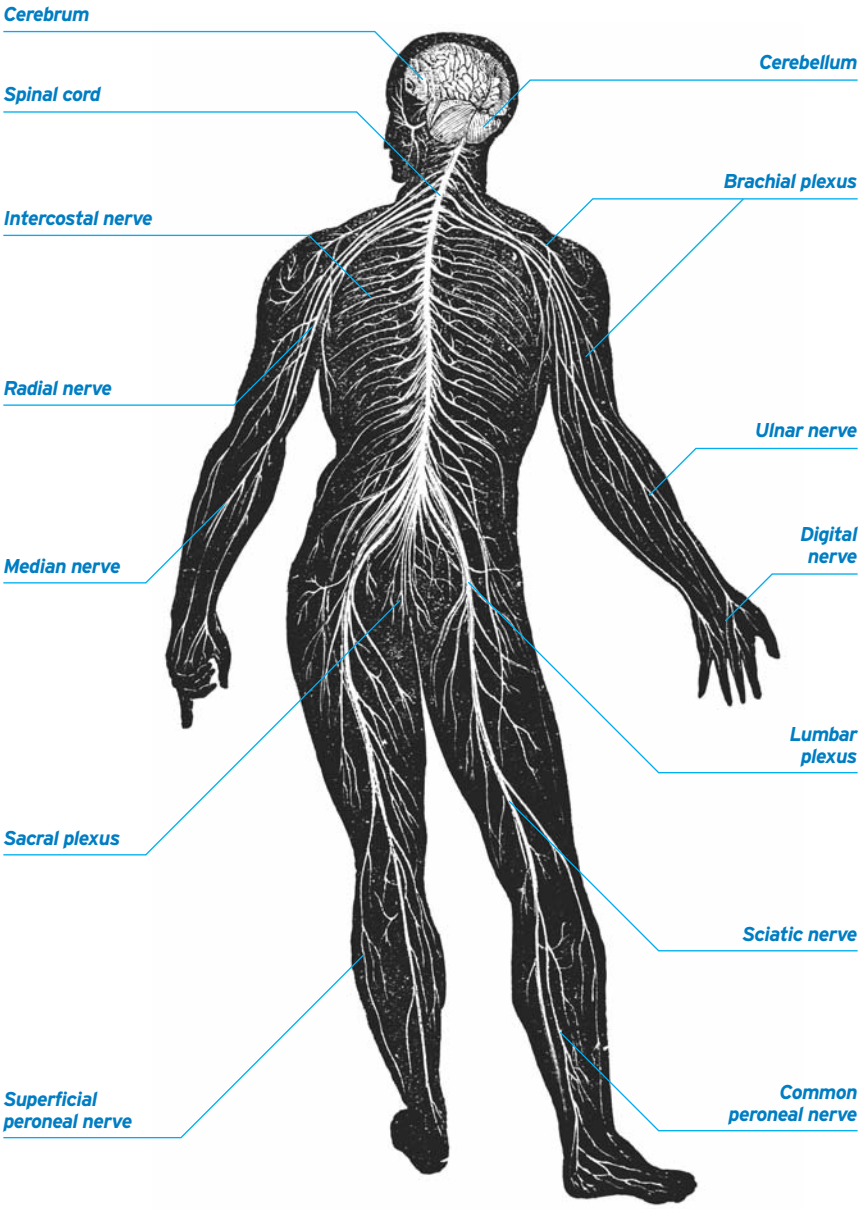


## Brain Part Locations

## Plexuses

The largest of the autonomic plexuses (a network of intersecting blood vessels or intersecting nerves or intersecting lymph vessels), lying in front of the aorta at the level of the origin of the coeliac artery and behind the stomach, formed by the splanchnic and the vagus nerves and by cords from the coeliac and superior mesenteric ganglia and branching to all the abdominal viscera through its connections with the other abdominal plexuses.

# Nervous System Overview



# Nervous System Glossary

**Brachial plexus**
The network of nerves relating to the arm.

**Cerebellum**
Nervous centre situated under the brain.

**Cerebrum**
Seat of the mental capacities.

**Common peroneal nerve**
Cord conducting nerve impulses along the inside of the lower leg.

**Digital nerve**
Cord conducting nerve impulses of the fingers.

**Intercostal nerve:**
The nerve that conducts nerve impulses in the rib cage.

**Lumbar plexus**
Network of nerves of the lower back.

**Median nerve**
A cord conducting nerve impulses in the upper limbs.

**Nervous system**
Set of nerves and ganglions that receive sensory signals. Also helps co-ordinate vital functions.

**Radial nerve**
A cord conducting nerve impulses in the area of the radius.

**Sacral plexus**
Network of nerves of the sacrum.

**Sciatic nerve**
Cord conducting nerve impulses in the area of the thigh and lower leg.

**Spinal cord**
Substance belonging to the nervous system, found in the holes of the vertebrae.

**Superficial peroneal nerve**
Cord conducting nerve impulses of the muscles and skin of the leg.

**Ulnar nerve**
A cord which conducts nerve impulses in the area of the elbow.

# Frequently Asked Questions

### What is PainSolv®?
PainSolv® is a portable health management medical device, delivering pulsed electromagnetic wave field therapy that can be used with equal effect by consumers and practitioners alike.

### What is different about PainSolv®?
PainSolv® is unique in that it features three different treatment options which may help give relief for a wide range of Pain, Wound and Stress-related Conditions. PainSolv® have researched and developed unique software algorithms for specific areas of therapy. Each of these programmed algorithms differs in duration, intensity and/or frequency.

### How does PainSolv® compare to TENS and other more well known treatments?
Unlike TENS, TSE and pain medications, PainSolv® doesn't block pain gateways (that transmit pain signals to the brain). PainSolv® is a drug-free alternative with no side effects and the unit is hand held and easily portable. TENS machines produce an electrical charge which permeates your skin and may eventually block the pain signals going to your brain. However, when TENS pads are removed from the skin, the pain can quickly return and even get worse in many instances. Over time, body tissues can develop resistance to TENS output requiring the settings to be increased, which in itself can cause even more discomfort than the original problem in some cases.

### How does PainSolv® work on the body?
Pulsed electromagnetic wave field therapy works by delivering pulse-modulated phasic wave forms into the body tissues of sufferers, penetrating tissue at a cellular level, normalising cell membrane potential. It is clinically proven that the pulse modulated non-ionising, non-thermal electromagnetic fields in the ELF (extremely low frequency) range can have vigorous biological effects that may be beneficial for a wide range of conditions.

### How does PainSolv® compare to magnet therapy?
Constant wave low level lasers and static magnets have never been proven to penetrate the skin. Clinical research carried out for NASA proved that millisecond duration pulsed electromagnetic fields have the greatest beneficial effect on living tissues over any other energy form. PainSolv® does not contain magnets of any kind.

### Should I consult my doctor before using PainSolv®?
You only need consult your doctor before using PainSolv® if you are in the first trimester of pregnancy or have an implanted cardiac pacemaker fitted; caution should also be used if you suffer from epilepsy. and are not being prescribed medication to control the condition. There are also conditions which need to be diagnosed by a medical doctor before use of PainSolv® begins (see pages 15-31 for further information).

### Is PainSolv® therapy easy to apply?

PainSolv® can be used either by applying direct to the skin or through clothing and even medical dressings - even plaster casts. PEMF waves pass through all types of body tissue. Electromagnetic waves are the only energy that is not affected by water, of which the human body contains large amounts.

### Does PainSolv® cause any side effects?

No, but the device should be used with caution if the sufferer is pregnant, suffers from epilepsy when no medication is prescribed. The device should not be used by haemophiliacs.

### Does PainSolv® therapy cause any pain during application?

Not at all. However, if the device is being used to help promote natural healing of leg ulcers for instance, it is possible that the sufferer could feel some tingling sensations due to improved circulation.

### Is PainSolv® safe to use on any part of the body?

You should never use the device internally as this could cause severe injury or even death. You should never allow children to use the device without supervision. You should not apply therapy directly onto the eyes. You should not apply the unit directly onto the carotid artery which is situated below the ear and behind the jaw on the neck, as in some users, this could cause severe headache.

### How often can PainSolv® be used without 'overdosing' on the therapy?

You can use PainSolv® as many times as you like in any one session and you cannot 'overdose'. The device is programmed to deliver Pain, Wound or Stress therapies in pre-programmed cycles. We recommend that you do not apply the therapy whilst driving!

### Does PainSolv® have exactly the same results for everyone using the device?

Medical conditions affect individuals differently. Treatment periods can vary from user to user and can also depend on how long you have suffered from your condition. No claim is made that PainSolv® can help diagnose or cure any specific condition and no such claims are made. No individual is the same and results may vary from person to person. If you have specific medical concerns, please consult your medical doctor.

## Product Specifications

| | |
|---|---|
| **Size** | 175 x 38 x 29mm maximum |
| **Weight** | 100g |
| **Operating Temperature Range** | -10 – +40°C |
| **Operating Humidity** | 5 – 85% relative humidity (non-condensing) |
| **Storage Temperature** | -10 – +60°C |
| **Storage Humidity** | 5 – 85% relative humidity (non-condensing) |
| **Power Source** | Internal rechargeable Nickel Metal Hydride<br>2 x 1.2V batteries |
| **Pulse Duration** | ~2.5ms |
| **Peak Field Intensity** | 135 Gauss |
| **Wave Form** | Damped bi-phasic sinusoidal |
| **Pulse Repetition Rate** | 0.67Hz |
| **Magnets** | PainSolv® does not contain magnets of any kind. |

## Classifications and Approvals

The PainSolv® medical device complies with:

- Medical Devices Directive 93/42/EEC Certificate CE 536176, Annex V, Section 3.2, for the manufacture of electromagnetic pulsed therapy devices for pain and wound relief and Certificate CE 524889 for Class IIa medical device under Annex IX, Rule 9 for active therapeutic devices intended to administer or exchange energy
- Relevant clauses of BS EN60601-1:1990
- Classified as Internally Powered Type BF
- Classified for Continuous Operation
- Relevant clauses of BS EN60601-1-2:2001 for safe operation within electromagnetic tolerances
- EMC Directive 2004/108/EC (Radio Frequency tolerable levels)
- Immune to EM disturbances that may affect operation or efficacy
- PainSolv, the manufacturers of PainSolv® operate a quality management system and are certified under ISO13485:2003 with certificate MD 524888 for design, manufacture and distribution of cell function medical devices
- PainSolv are also CMDCAS Health Canada certified FM 533597 for the manufacture and distribution of pulsed electromagnetic devices for relaxation training and muscle re-education

# Manufacturer's Product Warranty

1 PainSolv warrants to the original purchaser (who has purchased from an Authorised Distributor or Retailer) that the PainSolv® Cell Function Management System™ device will be free from defects in materials and workmanship for a period not less than 12 months from purchase under normal use, when used in conjunction with the supplied instructions for use.

2 During the warranty period PainSolv's sole obligation shall be at PainSolv's discretion to replace or repair the PainSolv® Cell Function Management System™ without charge to the original purchaser.

3 In order to claim under this Warranty, the original purchaser must contact the Authorised Distributor or Retailer they purchased the product from by telephone, fax or email to apply for a Return Authorisation Number (RAN).

4 The original purchaser must have an original copy of the invoice received from the Authorised Distributor or Retailer or the Serial Number and Batch number in order to verify that the product is still covered by Warranty.

5 Once the RAN is obtained from the Authorised Distributor or Retailer, the original purchaser may then return the device direct to PainSolv Customer Services Department, 120 Queens Road, Leicester LE2 3FL, securely packaged in the original packaging with postage and postage insurance prepaid. PainSolv will not be responsible for improper packaging or carriage.

6 If PainSolv determines that there is a defect covered by this Warranty, the repaired or replaced product will be shipped back, carriage and insurance prepaid, as soon as is reasonably possible.

7 In this case, PainSolv will also reimburse the postage costs of the original purchaser by way of a Complimentary Voucher which can be used for PainSolv goods to the value of £20.

8 If PainSolv determines in its sole discretion that the product does not contain defective workmanship or materials, PainSolv will return the product to the original purchaser.

9 This Warranty is voided immediately if the product has been subjected to abuse, accidental damage, damage in transit, negligence, or damage resulting from failure to follow operating instructions or alteration or disassembly by anyone other than PainSolv engineers.

10 PainSolv shall not be liable for any direct, indirect, special, incidental or consequential damages, lost profits or medical expenses incurred caused by any defect, failure, malfunction or otherwise of the device, regardless of the form in which any legal or equitable action may be brought against PainSolv.

11 In no event shall PainSolv liability under any cause of action relating to the device exceed the purchase price of the product net of Value Added Tax.

12 Whilst in the opinion of PainSolv Ltd, the PainSolv® Cell Function Management System™ is generally effective in relieving pain and other specified conditions, healthcare is not an exact science and individual results will vary accordingly and PainSolv makes no warranties as to the effectiveness of it products.

13 This Warranty shall be governed by and construed in accordance with English Law and you hereby agree to be subject to the jurisdiction of the Courts of England.

PainSolv®

*Pain is unavoidable. Choose to suffer less.*

CE 0086

**PainSolv Limited**
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